

Prüfbericht-Nr.: Test report no.:	CN25D2HQ 001	Auftrags-Nr.: Order no.:	168549449	Seite 1 von 38 Page 1 of 38
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2025-04-15	
Auftraggeber: Client:	Lumi United Technology Co., Ltd. Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No. 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China			
Prüfgegenstand: Test item:	Smart Lock U400			
Bezeichnung / Typ-Nr.: Identification / Type no.:	DL-D06E, DL-D16E, DL-D06D, DL-D16D, DL-D17D, DL-D15D			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	EN 301 489-1 V2.2.3 EN 301 489-3 V2.3.2 EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1 EN 55032:2015+A11:2020	EN 55035:2017+A11:2020 EN IEC 61000-6-1:2019 EN IEC 61000-6-3:2021 EN IEC 61000-3-2:2019+A1:2021+A2:2024 EN 61000-3-3:2013+A2:2021		
Wareneingangsdatum: Date of sample receipt:	2025-04-21			
Prüfmuster-Nr.: Test sample no.:	A003967556-003-007 3-1			
Prüfzeitraum: Testing period:	2025-05-12 - 2025-06-11			
Ort der Prüfung: Place of testing:	Refer to section 2.1			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	X Lin	genehmigt von: authorized by:	Andy Yan	
Datum: Date:	2025-06-12	Ausstellungsdatum: Issue date:	2025-06-12	
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / Other:	This report is for EMC requirements.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) * Legend: P(ass) = passed a.m. test specification(s)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n) F(ail) = failed a.m. test specification(s)		N/A = nicht anwendbar N/A = not applicable	N/T = nicht getestet N/T = not tested
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>				

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Anmerkungen
Remarks

1	<p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfills the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>
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3	<p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>
4	<p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2023, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p>

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Test Summary

5.1.1 HARMONIC CURRENT EMISSIONS ON AC MAINS

RESULT: Not applicable

5.1.2 VOLTAGE FLUCTUATIONS AND FLICKER ON AC MAINS

RESULT: Pass

5.1.3 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

5.1.4 RADIATED EMISSION

RESULT: Pass

5.2.1 RADIO FREQUENCY ELECTROMAGNETIC FIELDS (RS)

RESULT: Pass

5.2.2 RADIO FREQUENCY CONTINUOUS CONDUCTED (CS)

RESULT: Pass

5.2.3 ELECTROSTATIC DISCHARGE (ESD)

RESULT: Pass

5.2.4 ELECTRICAL FAST TRANSIENTS (EFT)

RESULT: Pass

5.2.5 SURGE

RESULT: Pass

5.2.6 VOLTAGE DIPS AND INTERRUPTIONS

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix A: Test Results of EMC.

2 Test Sites

2.1 Test Facilities

1. TÜV Rheinland (Shenzhen) Co., Ltd.

2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, China

CNAS Registration No.: L3080

2. CVC Testing Technology (Shenzhen) Co., Ltd.

No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

CNAS accreditation certification number: L16091

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

TÜV Rheinland (Shenzhen) Co., Ltd.

Conducted Emission on AC Mains				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102680	2026-02-09
Artificial Mains Network	R&S	ENV216	102333	2025-07-22
EMC32 Test Software	R&S	EMC32(Ver.10.50.00)	N/A	N/A
Harmonics & Flicker				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
5KVA AC Power Source	California Instruments	5001ix-CTS-400-413	1827A00145	2025-07-22
Harmonics/Voltage Fluctuation and Flicker Test System	California Instruments	100-CTS-230	1827A00144	2025-07-22
Test Software	California Instruments	CTS 4 (Ver.4.29.0)	N/A	N/A
Radiated Emission (3m chamber)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
3m SAC	ETS-Lindgren	SAC3	CT001632-Q1362	2027-09-11
EMI Test Receiver	R&S	ESR7	102111	2025-08-18
Active Magnetic Loop Antenna	Schwarzbeck	FMZB1519B	00080	2025-09-01
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	0945	2025-07-17
Shield Cable #1(9KHz-1GHz)	N/A	N/A	N/A	2025-12-20
Spectrum Analyzer	R&S	FSV40-N	102030	2025-11-13
EMC32 Test Software	R&S	EMC32(Ver.10.60.20)	N/A	N/A
Radiated Emission (10m chamber)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
10m SAC	ETS-Lindgren	SAC10	CT001632-Q1399	2027-10-22
EMI Test Receiver 1	R&S	ESR7	102022	2025-08-18

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EMI Test Receiver 2	R&S	ESR7	102023	2025-08-18
Spectrum Analyzer	R&S	FSV40-N	102030	2025-11-13
Horn Antenna	R&S	HF907	102707	2025-10-19
Preamplifier 3 (1-18GHz)	R&S	SCU-18F	180077	2025-10-19
SHF-EHF Horn	Schwarzbeck	BBHA 9170	01384	2025-11-25
Preamplifier	Schwarzbeck	BBV 9721	00140	2025-11-13
Shield Cable #3(9KHz-18GHz)	N/A	N/A	N/A	2025-12-20
Shield Cable #4(1-18GHz)	N/A	N/A	N/A	2025-12-20
EMC32 Test Software	R&S	EMC32(Ver.10.60.20)	N/A	N/A
Electrostatic Discharge (ESD)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
ESD Tester	TESEQ	NSG-437	1282	2025-08-02
Radio Frequency Electromagnetic Field (RS)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
3m FAC	ETS-Lindgren	FAC3	CT001632-Q1360	2027-09-12
Signal Generator	R&S	SMB100A	115183	2025-08-18
Power Amplifier	R&S	BBA150-BC250	103102	2025-08-18
Power Amplifier	R&S	BBA150-D110E100	103117	2025-08-18
NRP6AN Average power sensor	R&S	NRP6AN	101161	2025-10-11
NRP6AN Average power sensor	R&S	NRP6AN	101162	2025-10-11
Stacked Double Log.-Per. Antenna	Schwarzbeck	STLP 9128E	0153	2026-01-11
Stacked Log.-Per. Antenna	SCHWARZBECK	STLP 9149	00520	2026-01-11
Laser Probe Interface	rf/microwave	FI7000	0351048	2025-08-28
Electric Field Probe Kit	rf/microwave	FL7006/KIT	0350352/0351122	2025-08-28
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A
Radio Frequency Continuous Conducted (CS)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Conducted Immunity Test System	TESEQ	NSG 4070	51350	2025-07-22
6 dB Attenuator	TESEQ	100w6db	N/A	2025-07-22
CDN	TESEQ	CDN M016	51055	2025-07-22
EFT, Surge and Voltage Dips and Interruptions				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EFT/Surge/Voltage Dips & Interruption Main test unit	EMTest	compact NX5 bspt-1-300-16	P1807214329	2025-07-22
Variac	EMTest	Variac NX-1-260-16	P1828221789	2025-07-22
EMC 4 IN 1 system test software	EMTest	Iec.control (V8.0.3)	N/A	N/A

CVC Testing Technology (Shenzhen) Co., Ltd.

CE Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Due
EMI Test Receiver	Rohde&Schwarz	ESR3	102693	1 year	2025/5/24
limiter (10 dB)	Rohde&Schwarz	ESH3-Z2	102824	1 year	2025/5/15
Voltage probe	Rohde&Schwarz	CVP9222C	28	1 year	2026/4/28
Current probe	Rohde&Schwarz	EZ-17	101442	1 year	2026/4/23
ISN network	Rohde&Schwarz	ENV 81	100401	1 year	2026/4/22
ISN network	Rohde&Schwarz	ENV 81 Cat6	101896	1 year	2026/4/22
#1Shielding room	MORI	854	N/A	3 year	2026/5/16
LISN	SCHWARZBECK	NSLK 8129	5021	1 year	2026/4/22
Temperature and humidity meter	/	C193561430	C193561430	1 year	2026/4/22
RE Test - 3M Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Due

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EMI Test Receiver	Rohde&Schwarz	ESR 26	101718	1 year	2025/5/24
Loop antenna (8.3k~30MHz)	Rohde&Schwarz	HFH2-Z2E	100951	1 year	2025/6/3
Antenna(30MHz~1000MHz)	SCHWARZBECK	VULB 9168	1132	1 year	2026/1/22
Horn antenna(1GHz-18GHz)	ETS	3117	227634	1 year	2026/3/24
Horn antenna(18GHz-40GHz)	SCHWARZBECK	BBHA 9170	1003	1 year	2026/3/21
3m anechoic chamber	MORI	966	N/A	1 year	2026/5/18
Preamplifier(10kHz-1GHz)	Rohde&Schwarz	SCU-01F	100298	1 year	2026/4/22
Preamplifier(1GHz-18GHz)	Rohde&Schwarz	SCU-18F	100799	1 year	2026/4/22
Attenuator	/	SJ-5dB	607684	1 year	2026/4/4
#1 control room	MORI	433	/	1 year	2026/5/16
Temperature and humidity meter	/	C193561473	C193561473	1 year	2026/4/28
ESD Test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Due
ESD Signal generator	TESEQ	NSG437	1517	1 year	2025/5/23
Temperature and humidity meter	/	C193561455	C193561455	1 year	2026/4/28
RS Test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Due
Fully anechoic chamber	MORI	844	N/A	3 year	2026/5/16
Analog signal Generator(8kHz ~ 12.75GHz)	Rohde&Schwarz	SMA 100B	103802	1 year	2026/4/22
Simulation of the mouth	B&K	4227	3252504	1 year	2025/5/28
Mic	B&K	4192	3204819	1 year	2025/5/24
1kHz standard audio source	B&K	BK4231	3025151	1 year	2025/5/28
Conditioning amplifier	B&K	2690-OS2	3010386	1 year	2025/5/24
Audio Analyzer	Rohde&Schwarz	UPV	104719	1 year	2026/4/22
Temperature and humidity meter	/	C193561464	C193561464	1 year	2026/4/28
Power Sensor	R&S	NRP-Z81	106173	1 year	2026/4/22

2.3 Uncertainty of Measurement

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Table 2: Measurement Uncertainty

TÜV Rheinland (Shenzhen) Co., Ltd.

Parameter	Uncertainty
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB
Radiated Emission (3m SAC), 30MHz to 1000MHz	± 4.52 dB
Radiated Emission (3m SAC), above 1000MHz	± 4.37 dB
Radiated Emission (10m SAC), 30MHz to 1000MHz	± 4.66 dB
Radiated Emission (10m SAC), above 1000MHz	± 4.35 dB
Mains Harmonic	± 4.60%

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Voltage Fluctuations & Flicker	± 0.64%
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CVC Testing Technology (Shenzhen) Co., Ltd.

No.	Item	Measurement Uncertainty
1	Conducted emission test	+/- 2.7 dB
2	Radiated emission 30MHz-1GHz	+/- 4.6 dB
3	Radiated emission 1GHz-18GHz	+/- 4.4 dB

Remark: 95% Confidence Levels, k=2.

3 General Product Information

3.1 Product Function and Intended Use

The Product is Smart Lock U400 which supports Bluetooth low energy, Thread, NFC and UWB functions.

Product difference description

Smart Lock U400	Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Model	DL-D06E	DL-D16E	DL-D06D	DL-D16D	DL-D17D	DL-D15D
Color	Black	Silver	Black	Silver	Shadow Black	Satin Nickel
Finishing	Matte (Spray Coating)		Matte (Spray Coating)		Brushed (Electroplating)	
Package content difference	Li-ion Battery × 1		Li-ion Battery × 1 + Hub M100 × 1		Li-ion Battery × 2	
External Panel						
Shape	Curved		Flat		Flat	
Main Body Material	Aluminium		Aluminium		Zinc	
Gliding Plate Material	Aluminium		Zinc		Zinc	
Keypad Material	PC + PET		PMMA		PMMA	
Internal Panel						
Main Body Material			Plastic			
Knob	Aluminium		Aluminium		Zinc	

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	Smart Lock U400
Type Designation:	DL-D06E, DL-D16E, DL-D06D, DL-D16D, DL-D17D, DL-D15D Note1: The differences between the products refer to above table. Note2: Select model DL-D06E as the main test model.
Operating Voltage:	Battery operated (7.3Vdc, 4880mAh) or USB-C operated (5V)
Operating Temperature Range:	-35°C ~ +66 °C

3.3 Independent Operation Modes

The basic operation modes are:

- On, Rechargeable battery charging
- On, Normal operation (Inner Panel+ Outer Panel+ Powered by Internal rechargeable battery) + Bluetooth+NFC+ UWB+ Thread
- On, Normal operation (Inner Panel+ Outer Panel+ Powered by Outer Panel USB-C) + Bluetooth+NFC+ UWB+ Thread
- On, Normal operation (Inner Panel+ Outer Panel+ Powered by Inner Panel USB-C) + Bluetooth+NFC+ UWB+ Thread
- Off

3.4 Noise Generating and Noise Suppressing Parts

For details refer to the Circuit Diagram.

3.5 Submitted Documents

- Application Form
- Operation Description
- PCB Layout
- User Manual
- Block Diagram
- Rating Label

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Immunity: The equipment under test (EUT) was configured to have its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5 and chapter 6.

According to clause 3.1, all tests were performed on model *DL-D06E* in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Power Bank	N/A	N/A	N/A
AC/DC Adapter	Baseus	TGAN65CE	N/A
Laptop	HUAWEI	Matebook D14	N/A
Adapter	Fangxin	FX2U-050150U	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

5 Test Results of EMC Requirement

5.1 Test Results of EMISSION

5.1.1 Harmonic Current Emissions on AC Mains

RESULT: Not applicable

Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1 EN IEC 61000-3-2:2019+A1:2021+A2:2024
Basic standard	:	EN IEC 61000-3-2:2019+A1:2021+A2:2024
Test requirement	:	EN 301 489-1 V2.2.3, Clause 8.5
Measured harmonics	:	2 - 40
Classification	:	Class A
Limit	:	EN IEC 61000-3-2:2019+A1:2021+A2:2024, Clause 7.1 Table 1

Exemption Conditions:

The EUT has power less than 75W. There is no limit described in EN 61000-3-2 Clause 7.1 for equipment below 75W other than lighting equipment. Hence the EUT are deemed to comply with this requirement without the further testing.

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5.1.2 Voltage Fluctuations and Flicker on AC Mains

RESULT:

Pass

Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1 EN 61000-3-3:2013+A2:2021
Basic standard	:	EN 61000-3-3:2013+A2:2021
Test requirement	:	EN 301 489-1 V2.2.3, Clause 8.6
Frequency range	:	0 – 2 kHz
Limit	:	EN 61000-3-3:2013+A2:2021, Clause 5

Test Setup

Date of testing	:	2025-06-11
Test voltage	:	AC 230V, 50Hz
Operation mode	:	A
Test ports	:	AC mains
Earthing	:	Not connected
Test configuration	:	Table-top
Ambient temperature	:	24 °C
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

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5.1.3 Conducted Emission on AC Mains

RESULT:

Pass

Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55032:2015+A11 EN IEC 61000-6-3:2021
Test requirement	:	EN 301 489-1 V2.2.3, Clause 8.4 EN 55032: 2015+A11, A.3 EN IEC 61000-6-3:2021, Clause 11
Frequency range	:	150 kHz – 30 MHz
Classification	:	Class B
Kind of test site	:	Shielded Room
Limit	:	EN 301 489-1 V2.2.3, Clause 8.4.3.2 EN 55032: 2015+A11, Table A.10 EN IEC 61000-6-3:2021, Table 4

Test Setup

Date of testing	:	2025-05-15 to 2025-05-17
Test voltage	:	AC 230V, 50Hz
Operation mode	:	A
Test ports	:	AC mains terminals
Earthing	:	Not connected
Test configuration	:	Table-top
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	Refer to test result

For the measurement records, refer to the appendix A.

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5.1.4 Radiated Emission

RESULT:

Pass

Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55032:2015+A11 EN IEC 61000-6-3:2021
Test requirement	:	EN 301 489-1 V2.2.3, Clause 8.2 EN 55032:2015+A11, A.2 EN IEC 61000-6-3:2021, Clause 11
Classification	:	Class B
Frequency range	:	30 MHz – 6000 MHz
Kind of test site	:	3m Semi-anechoic Chamber for below 1GHz 10m Semi-anechoic Chamber for above 1GHz
Limit	:	EN 301 489-1 V2.2.3, Clause 8.2.3 EN 55032:2015+A11, Table A.4 and A.5 EN IEC 61000-6-3:2021, Table 3

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz or Battery operated (7.3Vdc)
Operation mode	:	A, B, C, D
Test Ports	:	Enclosure
Earthing	:	Not connected
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	Refer to test result

This testing was carried out on all operation modes, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.

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5.2 Test Results of IMMUNITY

5.2.1 Radio Frequency Electromagnetic Fields (RS)

RESULT: Pass

Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55035:2017+A11 EN IEC 61000-6-1:2019
Basic standard	:	EN IEC 61000-4-3: 2020
Test requirement	:	EN 301 489-1 V2.2.3, Clause 9.2 EN 55035:2017+A11, Table 1 EN IEC 61000-6-1:2019, Table 1
Frequency range	:	80MHz to 6000MHz for Swept test 1800MHz, 2600MHz, 3500MHz, 5000MHz for Spot test 80MHz to 1000MHz & 1.4GHz to 6GHz for EN IEC 61000-6-1
Test level	:	3 V/m, (unmodulated, r.m.s)
Modulation	:	80% AM by a sinusoidal signal of 1kHz
Kind of test site	:	3m Full-anechoic Chamber
Performance criteria	:	A

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz or Battery operated (7.3Vdc)
Operation mode	:	A, B, C, D
Test Ports	:	Enclosure
Ambient temperature	:	24.2 °C
Relative humidity	:	53.2 %
Atmospheric pressure	:	101 kPa

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Table 5: Test Result of Radio Frequency Electromagnetic Fields (RS), swept test

Test Frequency Band	Test port / Test Level	Polarity	Location	Result	Performance criterion
80MHz – 1000MHz	Enclosure / 3V/m	Vertical / Horizontal	Front	Pass	A*
			Rear	Pass	A*
			Left	Pass	A*
			Right	Pass	A*
1000MHz – 6000MHz	Enclosure / 3V/m	Vertical / Horizontal	Front	Pass	A*
			Rear	Pass	A*
			Left	Pass	A*
			Right	Pass	A*

Table 6: Test Result of Radio Frequency Electromagnetic Fields (RS), spot test

Test Frequency Band	Test port / Test Level	Polarity	Location	Result	Performance criterion
Spot Frequency 1800MHz, 2600MHz, 3500MHz, 5000MHz	Enclosure / 3V/m	Vertical / Horizontal	Front	Pass	A*
			Rear	Pass	A*
			Left	Pass	A*
			Right	Pass	A*

*Note1: Remark: No degradation was observed during and after the tests.

*Note2: During and after the tests, the FER/PER/BER of Thread and Bluetooth are less than 10%.

*Note3: During and after the testing, the EUT NFC message acceptance ratio is higher than 80 %.

 *Note4: During and after the testing, the EUT UWB radar cross-section accuracy is greater than 1 m².

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5.2.2 Radio Frequency Continuous Conducted (CS)

RESULT:
Pass
Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55035:2017+A11 EN IEC 61000-6-1:2019
Basic standard	:	EN 61000-4-6: 2009
Test requirement	:	EN 301 489-1 V2.2.3, Clause 9.5 EN 55035:2017+A11, Table 4 EN IEC 61000-6-1:2019, Table 4
Frequency range	:	0.15 - 80 MHz
Source impedance	:	150 Ω
Test level	:	3V (unmodulated, r.m.s.) for EN 301 489-1 3V (unmodulated, r.m.s.) for 0.15 to 10MHz for EN 55035 3V to 1V (unmodulated, r.m.s.) for 10 to 30MHz for EN 55035 1V (unmodulated, r.m.s.) for 30 to 80MHz for EN 55035
Modulation	:	AM 80%, 1 kHz sine-wave
Sweep mode	:	Automatic
Sweep rate	:	< 1.5×10 ⁻³ decade / sec.
Performance criteria	:	A

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz
Operation mode	:	A
Test Ports	:	AC mains power port
Earthing	:	Not connected
Ambient temperature	:	24.2 °C
Relative humidity	:	53.8 %
Atmospheric pressure	:	101 kPa

Table 7: Test result of Radio Frequency Continuous Conducted (CS)

Test Frequency Band	Coupling Method	Test Port	Test Level	Actual Performance
150kHz – 80MHz	Direct Injection CND M2	AC mains power port	3.0 V	A*
150kHz – 10MHz			3.0 V	A*
10MHz – 30MHz			3.0 V to 1.0V	A*
30MHz – 80MHz			1.0 V	A*

*Note1: Remark: No degradation was observed during and after the tests.

*Note2: During and after the tests, the FER/PER/BER of Thread and Bluetooth are less than 10%.

*Note3: During and after the testing, the EUT NFC message acceptance ratio is higher than 80 %.

 *Note4: During and after the testing, the EUT UWB radar cross-section accuracy is greater than 1 m².

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5.2.3 Electrostatic Discharge (ESD)

RESULT:
Pass
Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55035:2017+A11 EN IEC 61000-6-1:2019
Basic standard	:	EN 61000-4-2: 2009
Test requirement	:	EN 301 489-1 V2.2.3, Clause 9.3 EN 55035:2017+A11, Table 1 EN IEC 61000-6-1:2019, Table 1
Discharge impedance	:	330 Ω / 150 pF
Test level	:	Air discharge: ± 2 kV, ± 4 kV, ± 8 kV Contact discharge: ± 4 kV HCP & VCP: ± 4 kV
Position	:	All exposed surfaces
Performance criteria	:	B

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz or Battery operated (7.3Vdc)
Operation mode	:	A, B, C, D
Test Ports	:	Enclosure
Earthing	:	Not connected
Ambient temperature	:	24.6 °C
Relative humidity	:	53.6 %
Atmospheric pressure	:	101 kPa

Table 8: Test Result of Electrostatic Discharge (ESD)

Test Mode	Test Level	Location	Actual Performance
A, B, C, D mode	± 4.0kV / Contact	HCP	A*
		VCP	A*
		Conducted Enclosure	A*
	± 2.0kV, ± 4.0kV, ± 8.0kV / Air	Non-conducted Enclosure	A*
		Button	A*
		Slot	A*

*Note1: Remark: No degradation was observed during and after the tests.

*Note2: During and after the tests, the FER/PER/BER of Thread and Bluetooth are less than 10%.

*Note3: During and after the testing, the EUT NFC message acceptance ratio is higher than 80 %.

*Note4: During and after the testing, the EUT UWB radar cross-section accuracy is greater than 1 m².

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5.2.4 Electrical Fast Transients (EFT)

RESULT:

Pass

Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55035:2017+A11 EN IEC 61000-6-1:2019
Basic standard	:	EN 61000-4-4: 2012
Test requirement	:	EN 301 489-1 V2.2.3, Clause 9.4 EN 55035:2017+A11, Table 4 EN IEC 61000-6-1:2019, Table 4
Test level	:	± 1.0 kV on AC
Test duration	:	2 minute per level & polarity
Rise time	:	5/50ns
Repetition frequency	:	5 kHz
Performance criteria	:	B

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz
Operation mode	:	A
Test Ports	:	AC mains power input ports
Earthing	:	Not connected
Ambient temperature	:	24.7 °C
Relative humidity	:	53.8 %
Atmospheric pressure	:	101 kPa

Table 9: Test Result of Electrical Fast Transients (EFT)

Test Mode	Coupling Method	Coupling Port	Test Level	Actual Performance
A mode	Direct Injection	Live + Neutral	± 1.0 kV on AC	A*

*Note1: Remark: No degradation was observed during and after the tests.

*Note2: During and after the tests, the FER/PER/BER of Thread and Bluetooth are less than 10%.

*Note3: During and after the testing, the EUT NFC message acceptance ratio is higher than 80 %.

*Note4: During and after the testing, the EUT UWB radar cross-section accuracy is greater than 1 m².

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5.2.5 Surge

RESULT:
Pass
Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55035:2017+A11 EN IEC 61000-6-1:2019
Basic standard	:	EN 61000-4-5: 2014+A1:2017
Test requirement	:	EN 301 489-1 V2.2.3, Clause 9.8 EN 55035:2017+A11, Table 4 EN IEC 61000-6-1:2019, Table 4
Test level	:	± 1.0 kV line to line
Repetition rate	:	Max. 1/min
Number of surges	:	5 (for each combination of parameters)
Performance criteria	:	B

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz
Operation mode	:	A
Test Ports	:	AC mains power port
T_r / T_h	:	1,2 / 50 μ s
Earthing	:	Not connected
Ambient temperature	:	24.7 °C
Relative humidity	:	54.8 %
Atmospheric pressure	:	101 kPa

Table 10: Test Result of Surge

Test Mode	Coupling Port	Test Level (\pm kV)	Coupling Phase	Actual Performance
A mode	AC mains power port	± 1.0 kV line to line	0	A*
			$\pi/2$	A*
			π	A*
			$3\pi/2$	A*

*Note1: Remark: No degradation was observed during and after the tests.

*Note2: During and after the tests, the FER/PER/BER of Thread and Bluetooth are less than 10%.

*Note3: During and after the testing, the EUT NFC message acceptance ratio is higher than 80 %.

 *Note4: During and after the testing, the EUT UWB radar cross-section accuracy is greater than 1 m².

5.2.6 Voltage Dips and Interruptions

RESULT:
Pass
Test Specification

Test standard	:	EN 301 489-3 V2.3.2, EN 301 489-17 V3.3.1 EN 301 489-33 V2.2.1, EN 55035:2017+A11 EN IEC 61000-6-1:2019
Basic standard	:	EN 61000-4-11: 2004
Test requirement	:	EN 301 489-1 V2.2.3, Clause 9.7 EN 55035:2017+A11, Table 4 EN IEC 61000-6-1:2019, Table 4
Test level	:	<input checked="" type="checkbox"/> voltage dip: 0% residual voltage for 0,5 cycle <input checked="" type="checkbox"/> voltage dip: 0% residual voltage for 1 cycle <input checked="" type="checkbox"/> voltage dip: 70% residual voltage for 25 cycles <input checked="" type="checkbox"/> voltage interruption: 0% residual voltage for 250 cycles
Performance criteria	:	B & C

Test Setup

Date of testing	:	2025-05-12 to 2025-06-04
Test voltage	:	AC 230V, 50Hz
Operation mode	:	A
Test Ports	:	AC mains power port
Earthing	:	Not connected
Ambient temperature	:	24.7 °C
Relative humidity	:	49.8 %
Atmospheric pressure	:	101 kPa

Table 11: Test Result of Voltage Dips and Interruptions

Test Mode	Coupling Port	Test Level U_T (%)	Reduction Duration (in Period)	Actual Performance
A mode	AC mains power port	0%	0.5(50Hz)	A*
		0%	1.0(50Hz)	A*
		70%	25(50Hz)	A*
		0%	250(50Hz)	B**

*Note1: Remark: No degradation was observed during and after the tests.

*Note2: During and after the tests, the FER/PER/BER of Thread and Bluetooth are less than 10%.

*Note3: During and after the testing, the EUT NFC message acceptance ratio is higher than 80 %.

*Note4: During and after the testing, the EUT UWB radar cross-section accuracy is greater than 1 m².

**Note5: During the test, The EUT stop charging. However, it could charge normally after test.

6 Photographs of the Test Set-Up

Photograph 1: Set-up for Harmonic Current Emissions and Voltage Fluctuations/Flicker

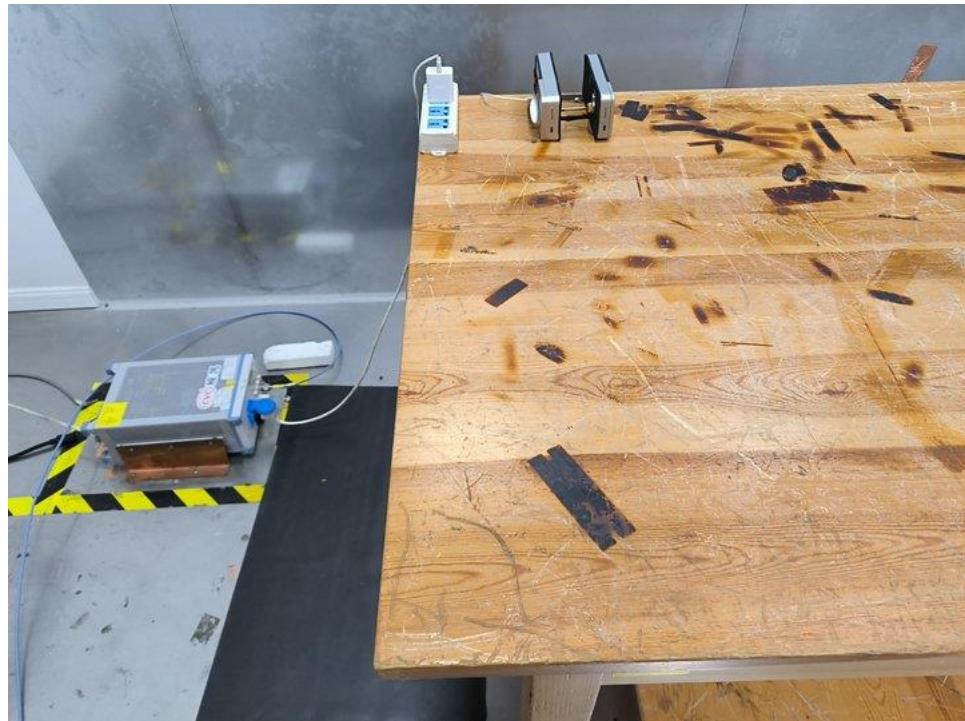


Photograph 2: Set-up for Conducted Emission on AC Mains

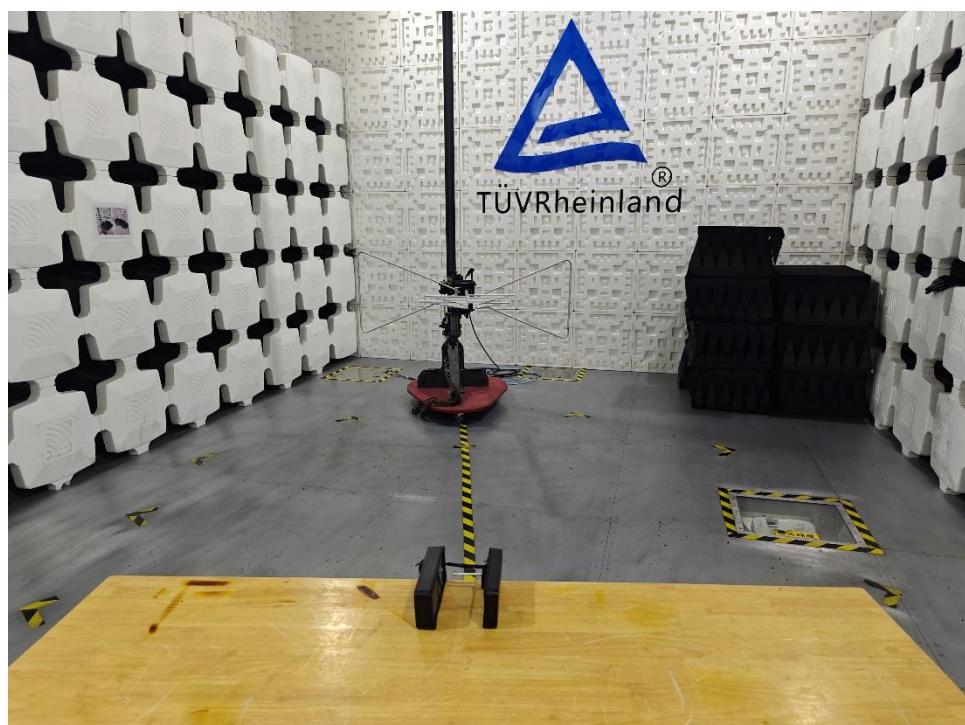


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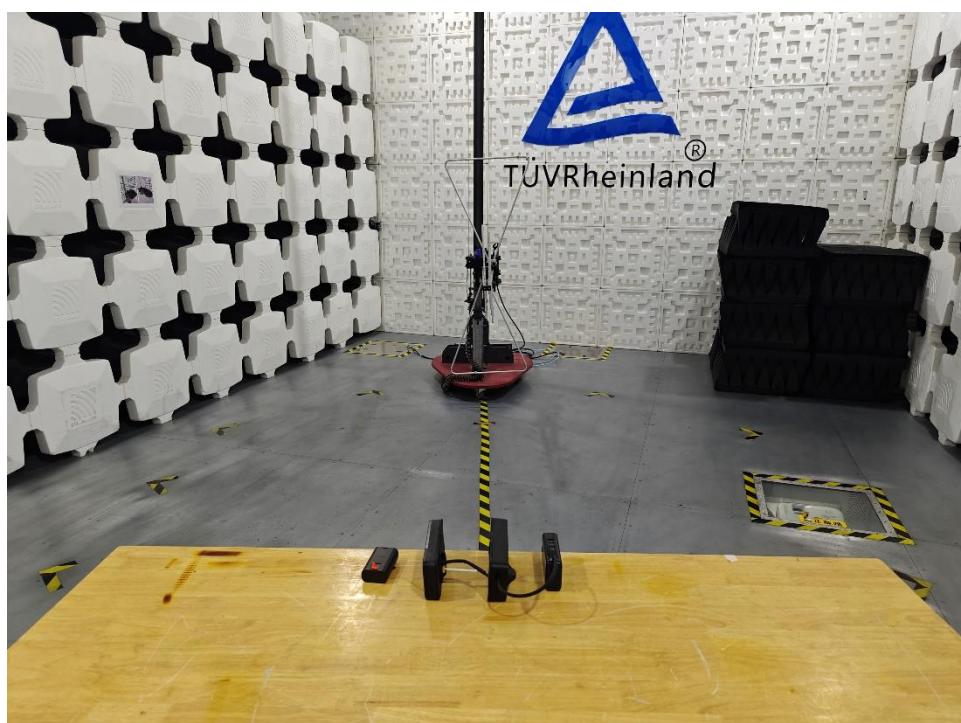
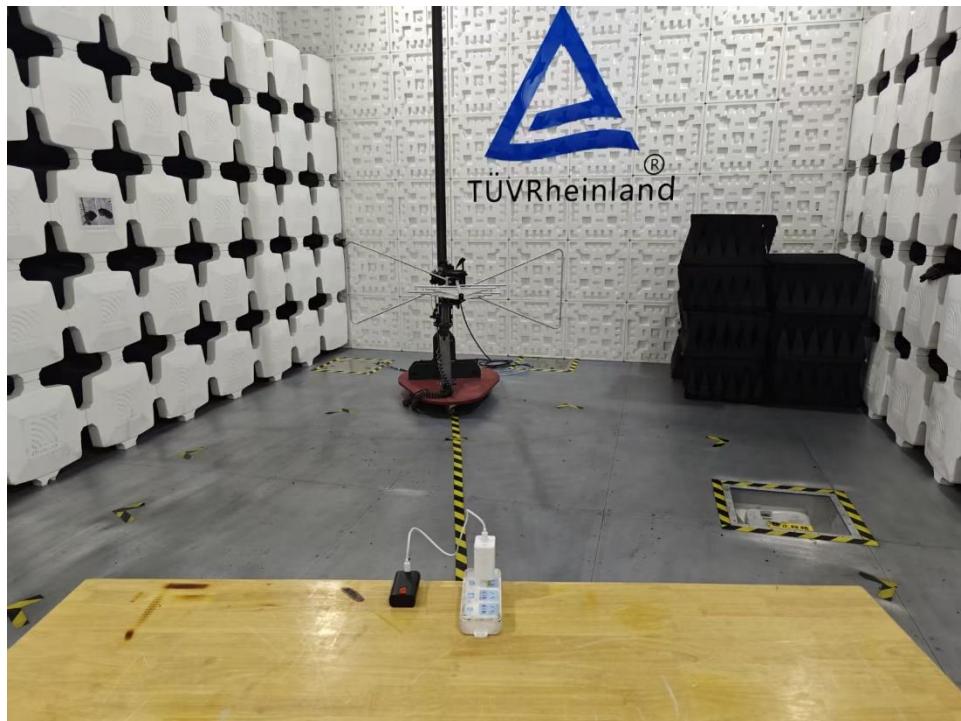


Photograph 3: Set-up for Radiated Emission, 30 MHz – 1 GHz



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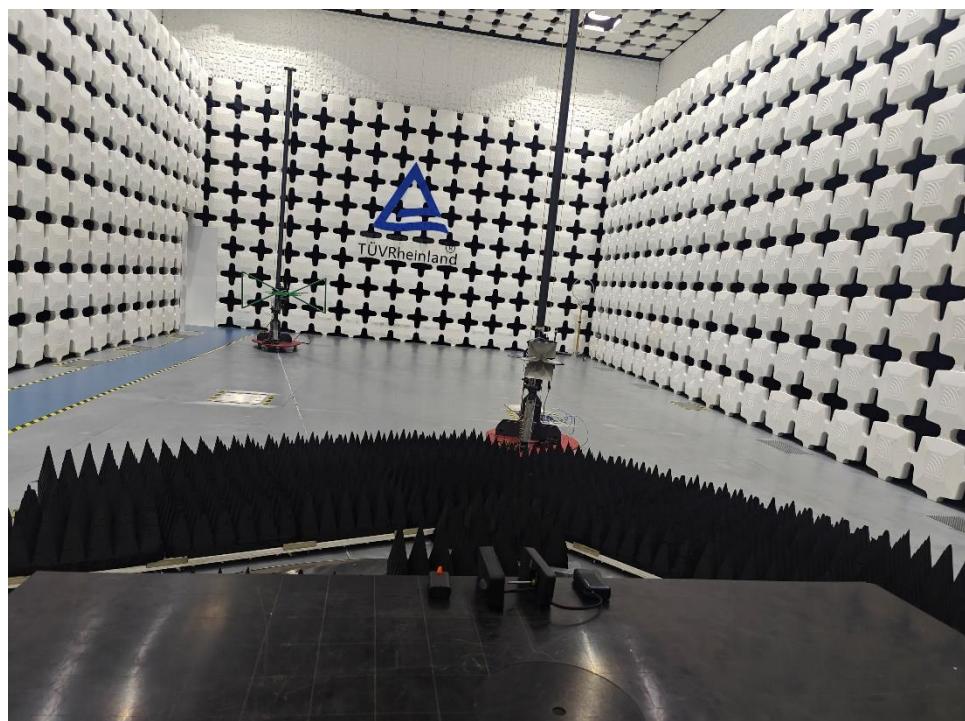
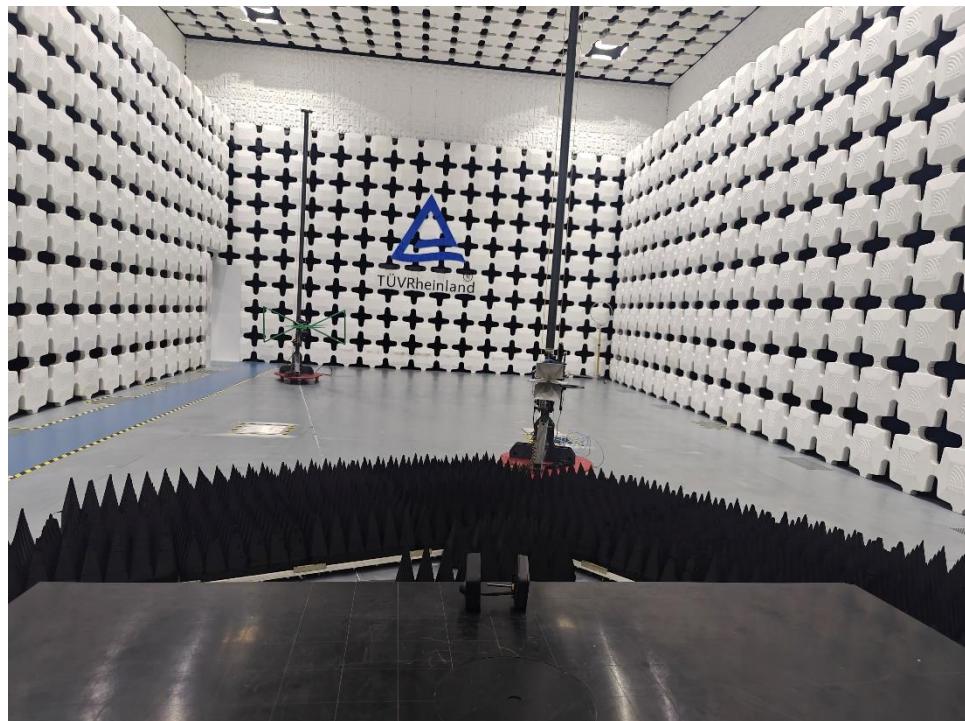
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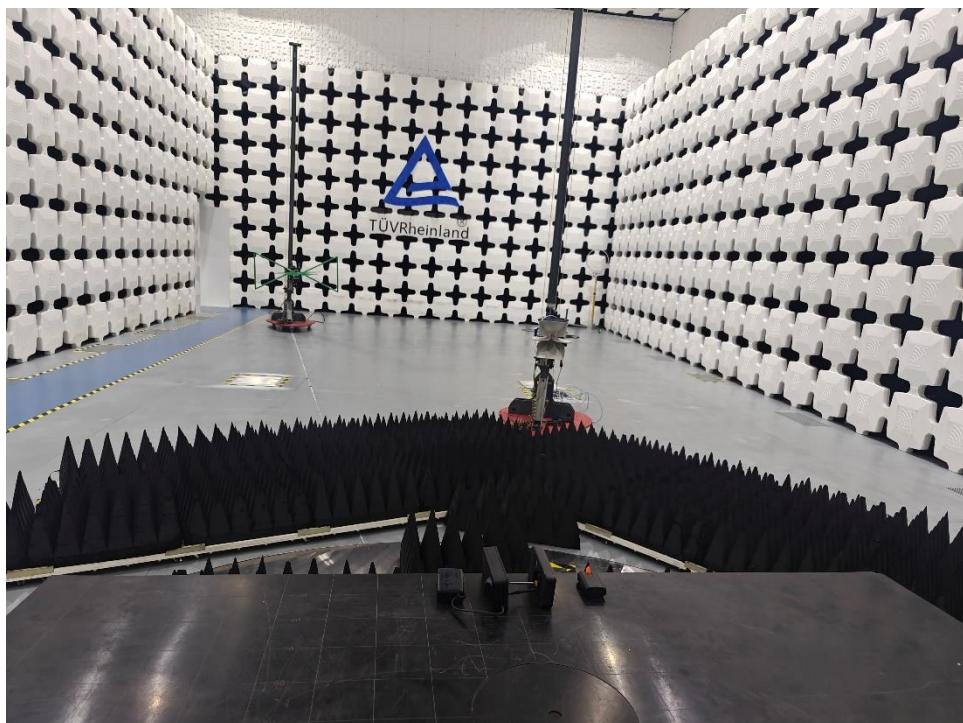
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Photograph 4: Set-up for Radiated Emission, Above 1GHz



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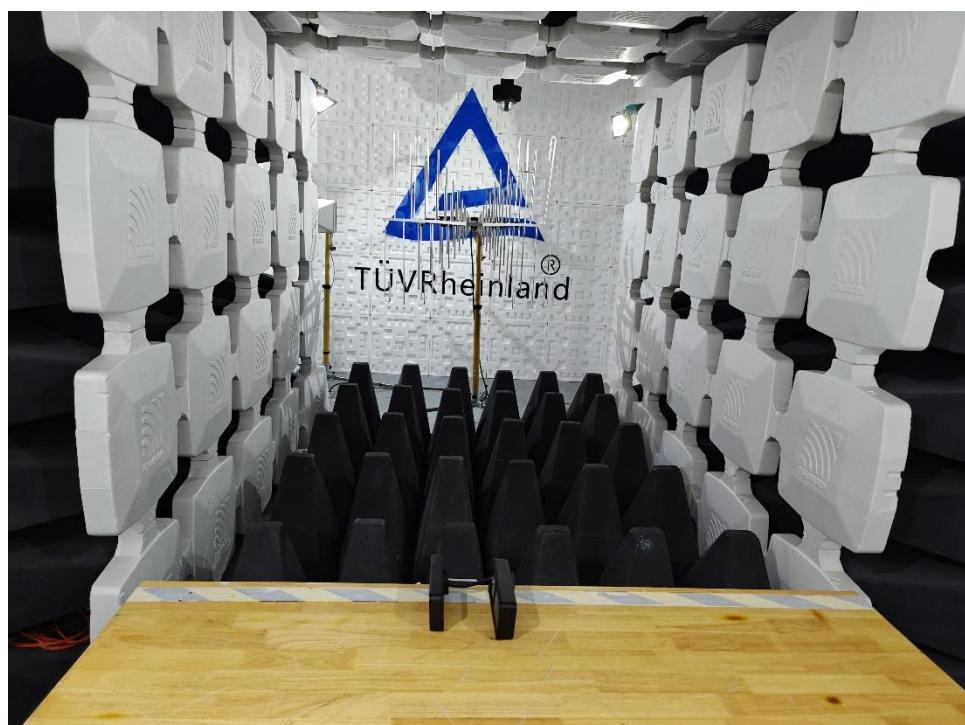


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Photograph 5: Set-up for Radio Frequency Electromagnetic Fields (RS), Below 1GHz



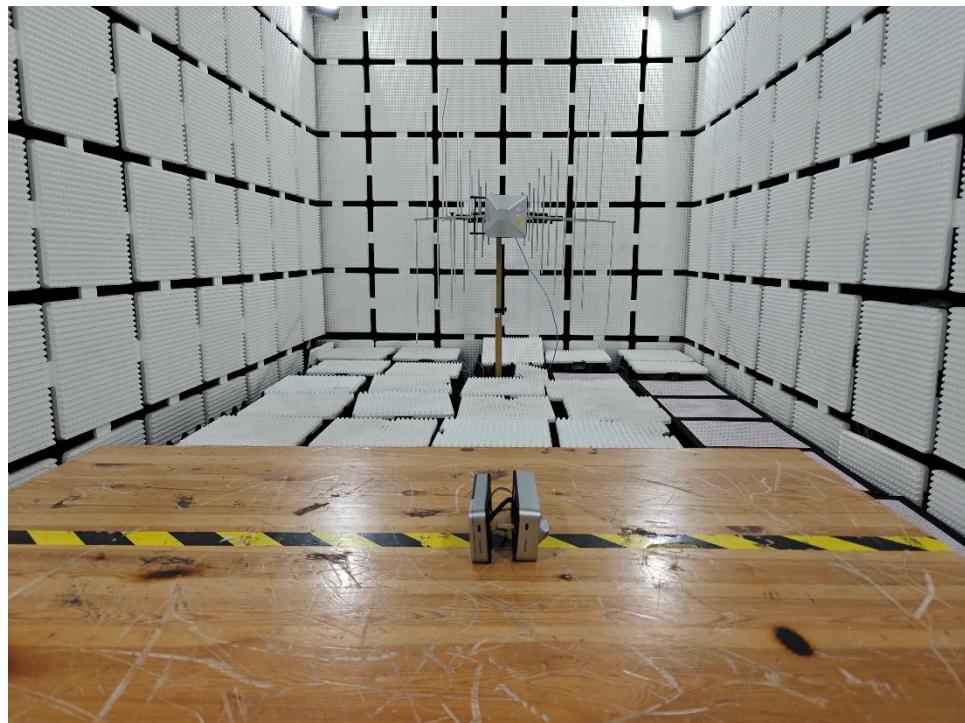
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Photograph 6: Set-up for Radio Frequency Electromagnetic Fields (RS), Above 1GHz



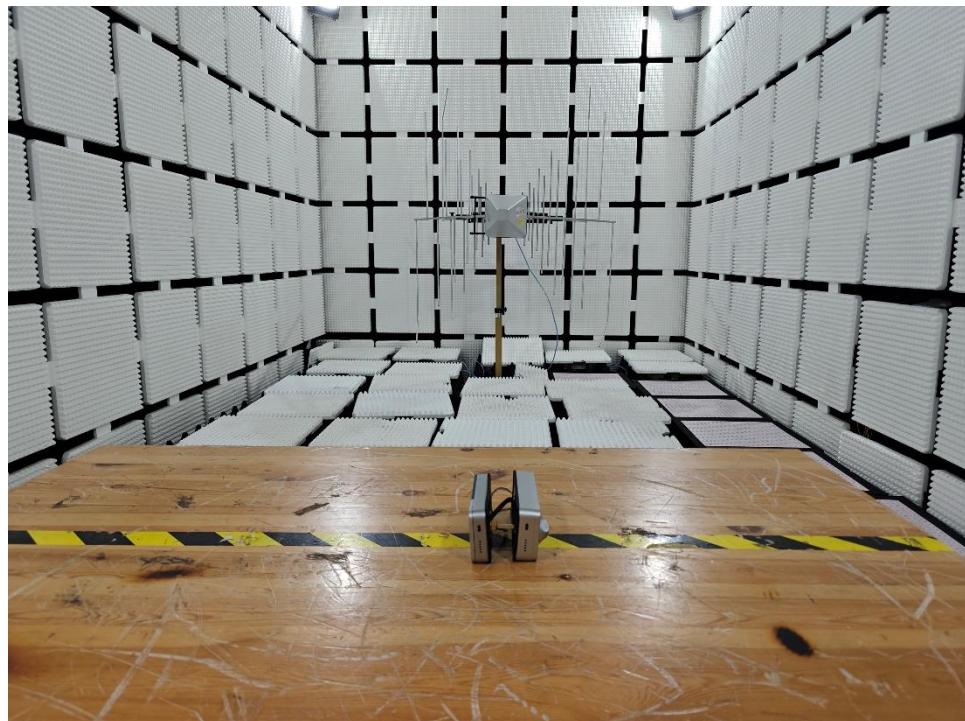
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Photograph 7: Set-up for Radio Frequency Continuous Conducted (CS)



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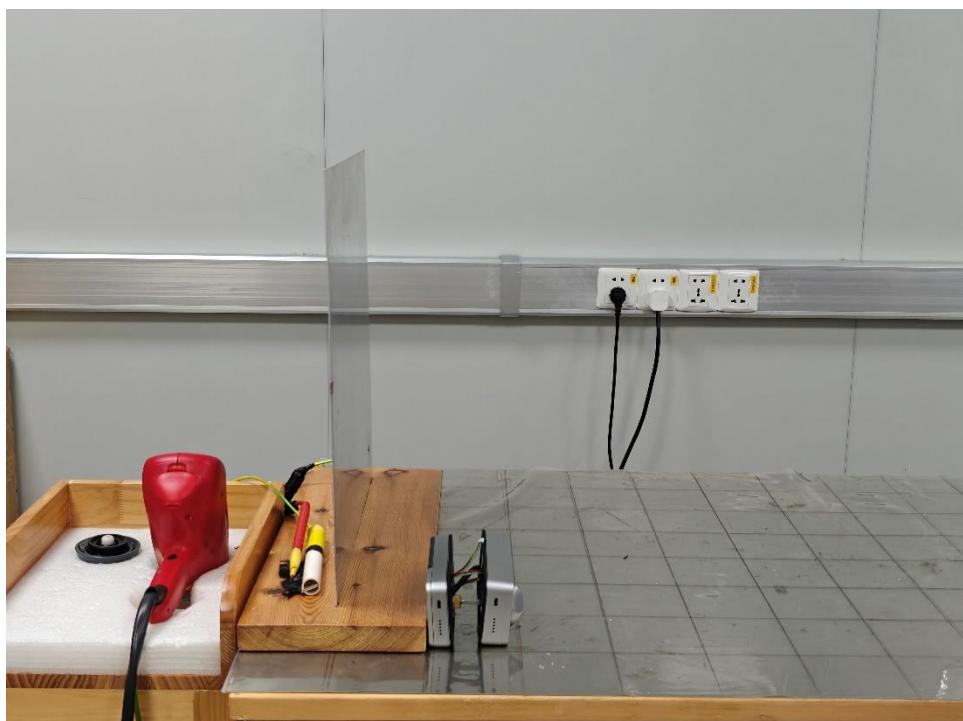
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Photograph 8: Set-up for Electrostatic Discharges (ESD)



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Photograph 9: Set-up for EFT / Surge / Dips



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Appendix A: Test Results of EMC

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Appendix A.1: Test Results of Voltage Fluctuations and Flicker on AC Mains

Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

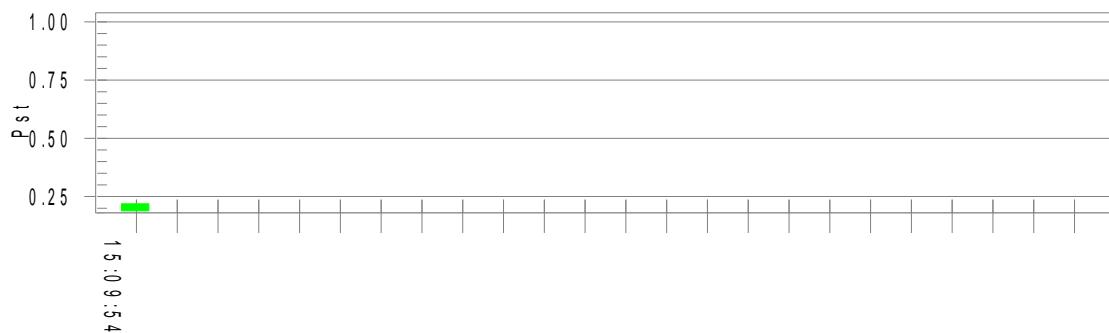
EUT: Smart Lock U400(DL-D06E) Tested by: Dawn Shen
Test category: All parameters (European limits) Test Margin: 100
Test date: 6/11/2025 Start time: 2:59:33 PM End time: 3:10:00 PM
Test duration (min): 10 Data file name: F-010376.cts_data
Comment: Murphy Chen
Customer: Lumi United Technology Co., Ltd.

Test Result: Pass

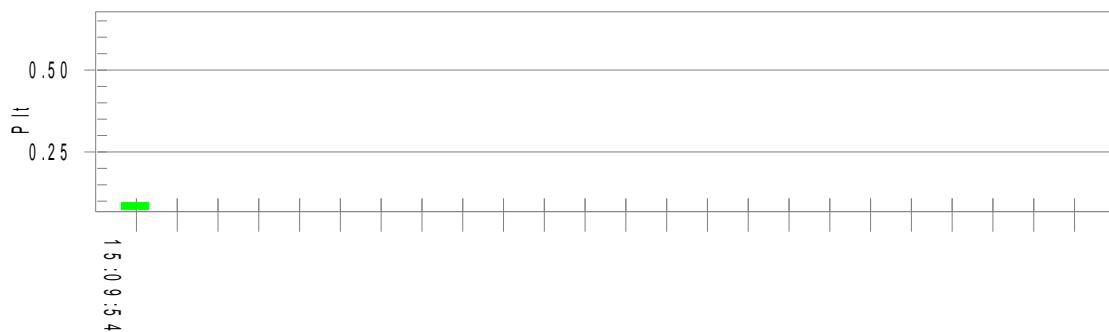
Status: Test Completed

Pst₁ and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt): 230.18

Highest dt (%):

T-max (mS): 0

Test limit (%):

Test limit (mS): 500.0 Pass

Highest dc (%): 0.00

Test limit (%): 3.30 Pass

Highest dmax (%): 0.00

Test limit (%): 4.00 Pass

Highest Pst (10 min. period): 0.219

Test limit: 1.000 Pass

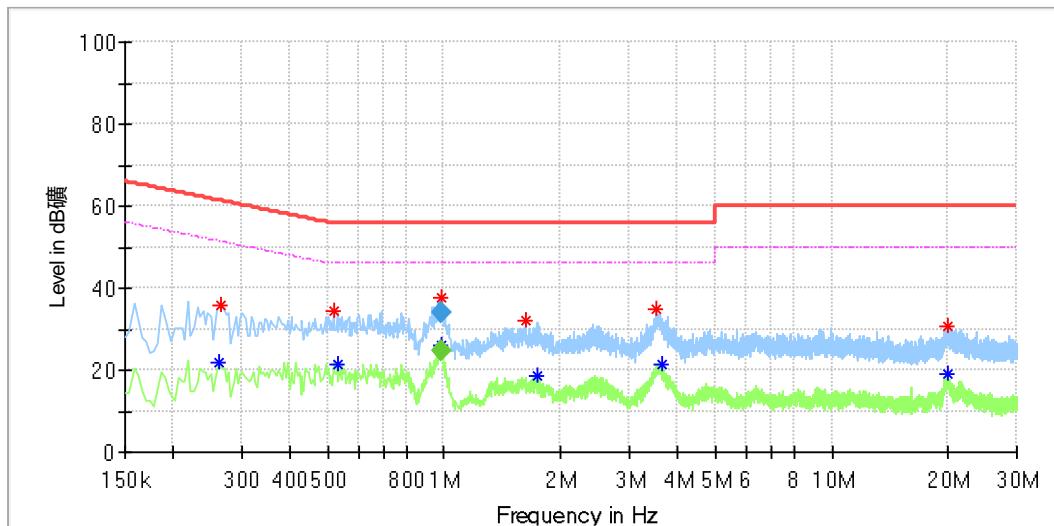
Highest Plt (2 hr. period): 0.096

Test limit: 0.650 Pass

Appendix A.2: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449
 Model: DL-D06E
 Test Mode: Rechargeable battery charging
 Test Voltage: AC 230V, 50Hz
 Test Standard: EN 55032
 Tem./Hum./Pressure: 24.9°C/50.3%/101kPa
 Test By-/Review By: Steve Lan/Shower Dai
 Remark: SR3



Critical_Freqs

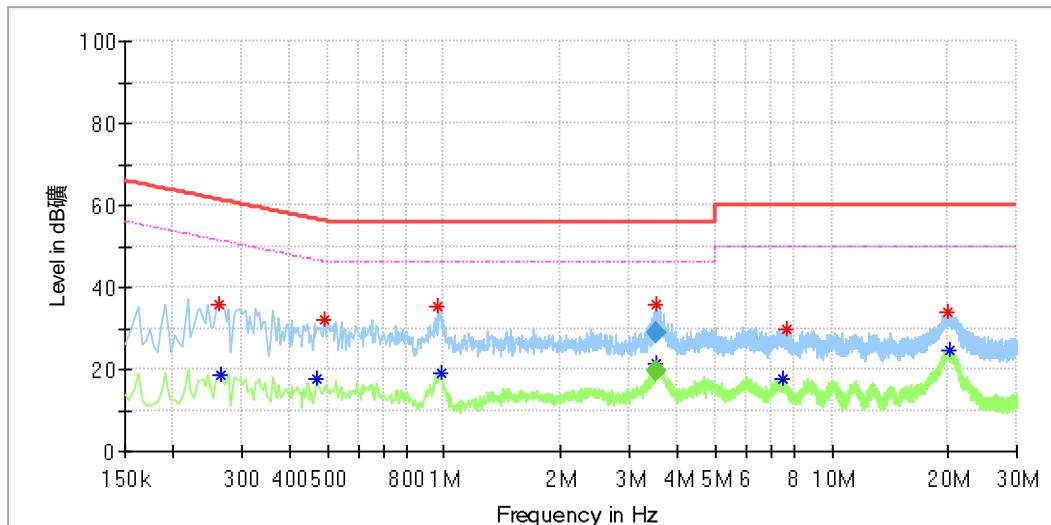
Frequency (MHz)	MaxPeak (dB μ V)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Corr. (dB)
0.262000	---	21.77	51.37	29.60	L1	9.8
0.266000	35.71	---	61.24	25.53	L1	9.8
0.518000	34.44	---	56.00	21.56	L1	9.9
0.530000	---	21.62	46.00	24.38	L1	9.9
0.977500	---	25.92	46.00	20.08	L1	9.9
0.981500	37.55	---	56.00	18.45	L1	9.9
1.626000	32.05	---	56.00	23.95	L1	10.0
1.742000	---	18.73	46.00	27.27	L1	10.0
3.510000	34.96	---	56.00	21.04	L1	10.1
3.626000	---	21.61	46.00	24.39	L1	10.1
19.902000	---	18.92	50.00	31.08	L1	10.2
19.994000	30.60	---	60.00	29.40	L1	10.2

Final_Result

Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.977500	---	24.78	46.00	21.22	1000.0	9.000	L1	9.9
0.981500	33.98	---	56.00	22.02	1000.0	9.000	L1	9.9

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449
 Model: DL-D06E
 Test Mode: Rechargeable battery charging
 Test Voltage: AC 230V, 50Hz
 Test Standard: EN 55032
 Tem./Hum./Pressure: 24.9°C/50.3%/101kPa
 Test By:/Review By: Steve Lan/Shower Dai
 Remark: SR3



Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Corr. (dB)
0.262000	35.88	---	61.37	25.49	N	9.7
0.266000	---	18.83	51.24	32.41	N	9.7
0.470000	---	17.77	46.51	28.74	N	9.7
0.490000	32.17	---	56.17	24.00	N	9.7
0.962000	35.24	---	56.00	20.76	N	9.7
0.982000	---	19.08	46.00	26.92	N	9.7
3.534500	---	21.42	46.00	24.58	N	9.8
3.537500	35.68	---	56.00	20.32	N	9.8
7.446000	---	17.64	50.00	32.36	N	9.8
7.650000	29.70	---	60.00	30.30	N	9.9
20.018000	34.08	---	60.00	25.92	N	10.0
20.086000	---	24.65	50.00	25.35	N	10.0

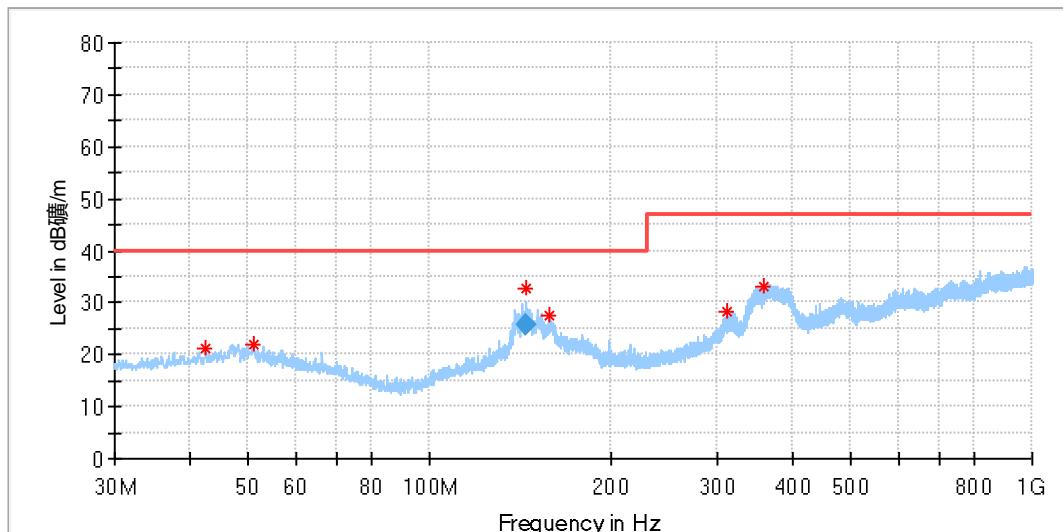
Final_Result

Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
3.534500	---	19.69	46.00	26.31	1000.0	9.000	N	9.8
3.537500	28.95	---	56.00	27.05	1000.0	9.000	N	9.8

Appendix A.3: Test Results of Radiated Emission, Below 1GHz

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449
Model: DL-D06E
Test Mode: Rechargeable battery charging
Test Voltage: AC 230V, 50Hz
Test Standard: EN 301489-1/-17
Test By/Review By: Dawn Shen/Murphy Chen
Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
Remark: 3m chamber



Critical_Freqs

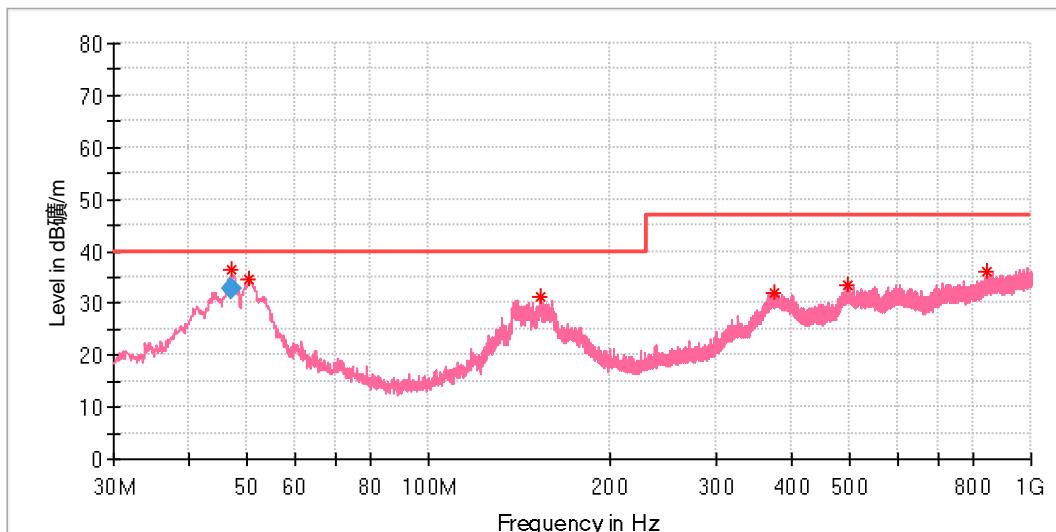
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
42.50	21.11	40.00	18.89	100.0	H	90.00	20.50
50.96	22.00	40.00	18.00	100.0	H	158.00	20.79
144.76	32.69	40.00	7.31	200.0	H	192.00	20.81
157.50	27.45	40.00	12.55	200.0	H	192.00	21.04
310.49	28.38	47.00	18.62	100.0	H	94.00	22.12
357.32	33.14	47.00	13.86	100.0	H	106.00	23.17

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimut h (deg)	Corr. (dB/m)
144.76	25.65	40.00	14.35	1000.00	120.00	200.0	H	192.00	20.80

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449
Model: DL-D06E
Test Mode: Rechargeable battery charging
Test Voltage: AC 230V, 50Hz
Test Standard: EN 301489-1/-17
Test By/Review By: Dawn Shen/Murphy Chen
Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
Remark: 3m chamber



Critical_Freqs

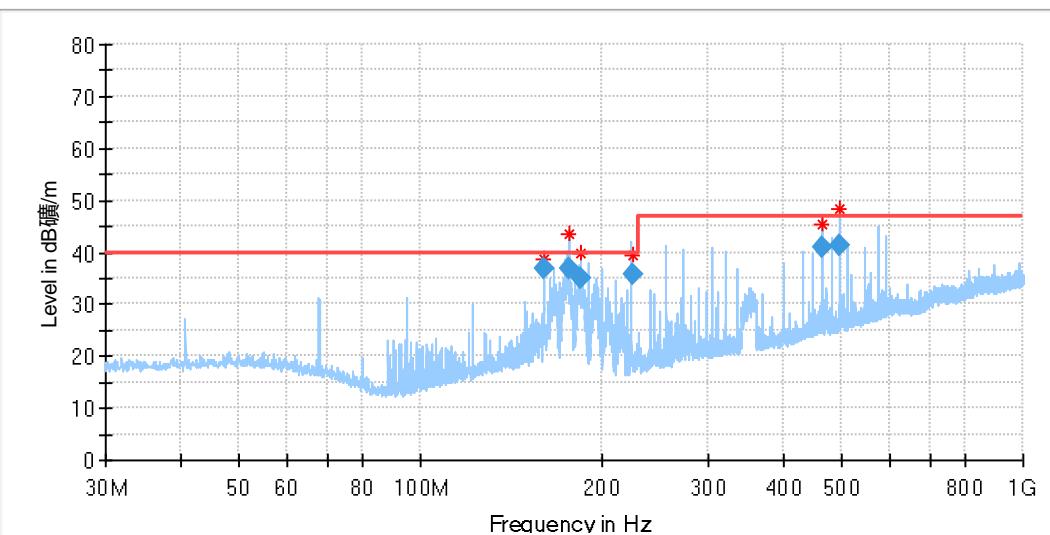
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
47.03	36.56	40.00	3.44	100.0	V	257.00	20.79
50.26	34.68	40.00	5.32	100.0	V	43.00	20.80
153.46	31.27	40.00	8.73	100.0	V	128.00	21.04
374.03	31.85	47.00	15.15	100.0	V	43.00	23.79
497.00	33.66	47.00	13.34	100.0	V	324.00	26.78
846.31	36.19	47.00	10.81	100.0	V	347.00	33.47

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimut h (deg)	Corr. (dB/m)
47.03	32.71	40.00	7.29	1000.00	120.00	100.0	V	257.00	20.78

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449
 Model: DL-D06E
 Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Internal rechargeable battery) + Bluetooth +NFC+ UWB+ Thread
 Test Voltage: Battery
 Test Standard: EN 301489-1/-17
 Test By:/Review By: Dawn Shen/Murphy Chen
 Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
 Remark: 3m chamber



Critical_Freqs

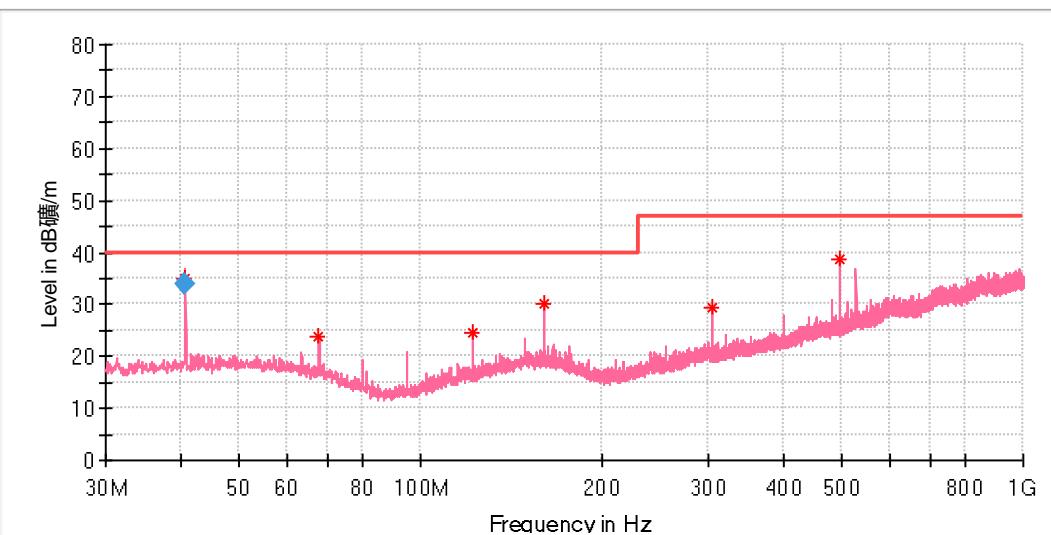
Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
159.98	38.67	40.00	1.33	200.0	H	54.00	21.01
176.35	43.42	40.00	-3.42	200.0	H	302.00	20.05
184.82	39.82	40.00	0.18	200.0	H	54.00	18.91
224.40	39.37	40.00	0.63	200.0	H	149.00	18.16
464.49	45.57	47.00	1.43	200.0	H	302.00	26.24
495.66	48.52	47.00	1.52	200.0	H	149.00	26.77

Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimut h (deg)	Corr. (dB/m)
159.98	36.70	40.00	3.30	1000.00	120.00	200.0	H	54.00	21.01
176.35	36.98	40.00	3.02	1000.00	120.00	200.0	H	302.00	20.01
184.82	35.06	40.00	4.94	1000.00	120.00	200.0	H	54.00	18.93
224.40	35.57	40.00	4.43	1000.00	120.00	200.0	H	149.00	18.18
464.49	40.80	47.00	6.20	1000.00	120.00	200.0	H	302.00	26.25
495.66	41.38	47.00	5.62	1000.00	120.00	200.0	H	149.00	26.77

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449
 Model: DL-D06E
 Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Internal rechargeable battery) + Bluetooth +NFC+ UWB+ Thread
 Test Voltage: Battery
 Test Standard: EN 301489-1/-17
 Test By:/Review By: Dawn Shen/Murphy Chen
 Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
 Remark: 3m chamber



Critical_Freqs

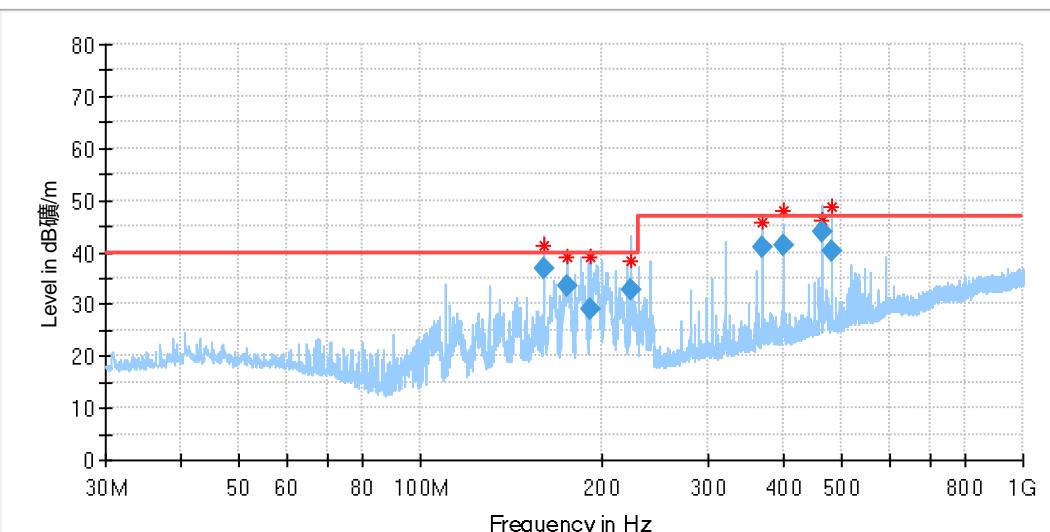
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.71	34.83	40.00	5.17	100.0	V	159.00	20.32
67.78	23.99	40.00	16.01	100.0	V	49.00	18.96
122.04	24.42	40.00	15.58	100.0	V	100.00	18.75
159.98	30.19	40.00	9.81	100.0	V	38.00	21.01
303.97	29.46	47.00	17.54	100.0	V	283.00	21.85
495.98	38.68	47.00	8.32	100.0	V	283.00	26.77

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimut h (deg)	Corr. (dB/m)
40.71	33.83	40.00	6.17	1000.00	120.00	100.0	V	159.00	20.32

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Outer Panel USB-C) + Bluetooth +NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By-/Review By: Dawn Shen/Murphy Chen
Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
Remark: 3m chamber

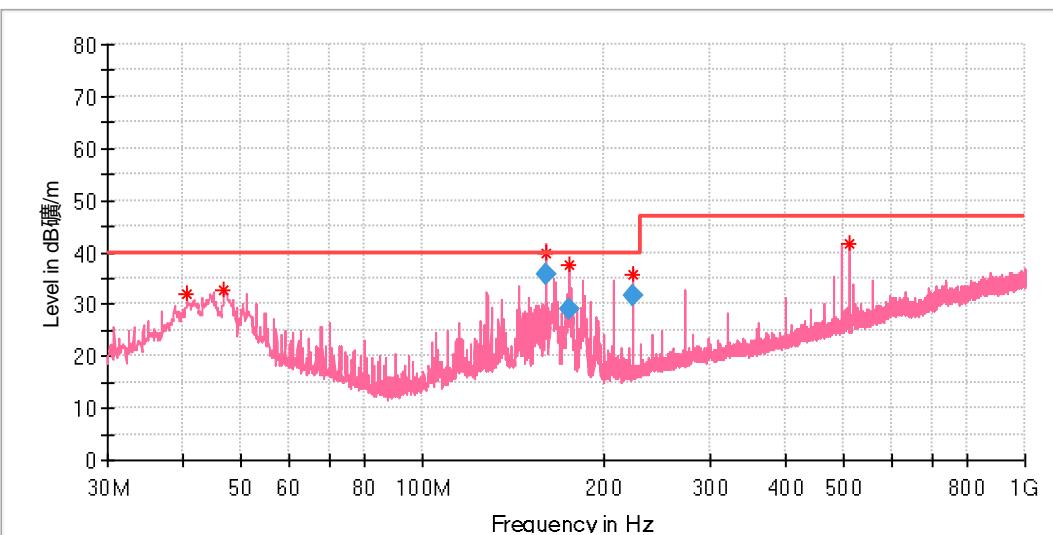


Final Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimut h (deg)	Corr. (dB/m)
160.02	36.81	40.00	3.19	1000.00	120.00	100.0	H	330.00	21.01
174.96	33.60	40.00	6.40	1000.00	120.00	100.0	H	234.00	20.17
191.79	29.04	40.00	10.96	1000.00	120.00	100.0	H	42.00	18.15
223.84	32.60	40.00	7.40	1000.00	120.00	100.0	H	42.00	18.15
368.47	41.01	47.00	5.99	1000.00	120.00	100.0	H	42.00	23.59
400.04	41.24	47.00	5.76	1000.00	120.00	100.0	H	172.00	24.39
463.45	43.98	47.00	3.02	1000.00	120.00	100.0	H	42.00	26.23
480.01	40.07	47.00	6.93	1000.00	120.00	200.0	H	123.00	26.58

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449
 Model: DL-D06E
 Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Outer Panel USB-C) + Bluetooth +NFC+ UWB+ Thread
 Test Voltage: Battery
 Test Standard: EN 301489-1-17
 Test By-/Review By: Dawn Shen/Murphy Chen
 Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
 Remark: 3m chamber



Critical_Freqs

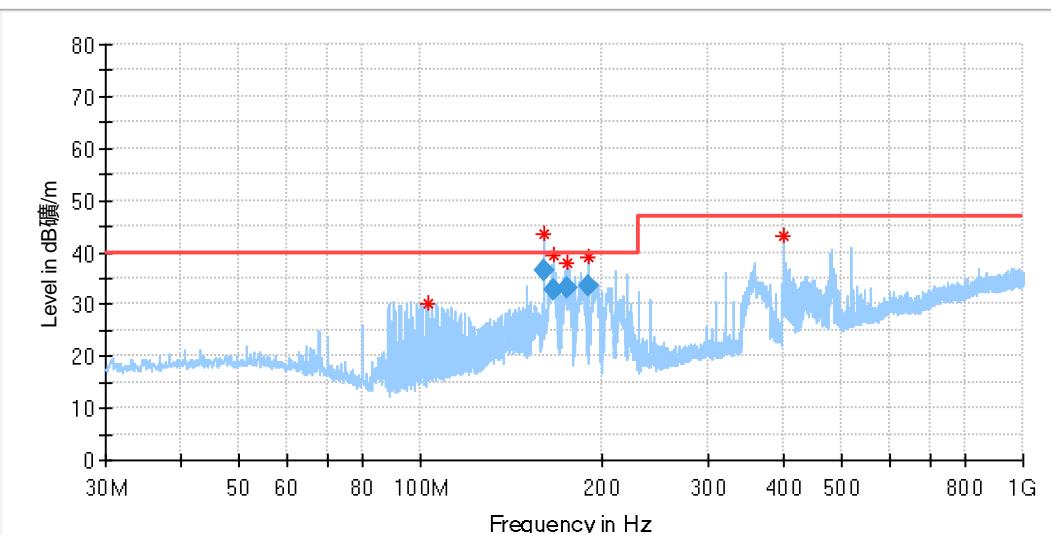
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.62	32.08	40.00	7.92	100.0	V	183.00	20.31
46.87	32.57	40.00	7.43	100.0	V	165.00	20.77
160.30	39.63	40.00	0.37	100.0	V	221.00	21.01
175.36	37.74	40.00	2.26	100.0	V	6.00	20.17
223.83	35.79	40.00	4.21	100.0	V	54.00	18.16
511.98	41.70	47.00	5.30	100.0	V	54.00	27.09

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimut h (deg)	Corr. (dB/m)
160.30	35.61	40.00	4.39	1000.00	120.00	100.0	V	221.00	21.00
175.36	29.18	40.00	10.82	1000.00	120.00	100.0	V	6.00	20.12
223.83	31.52	40.00	8.48	1000.00	120.00	100.0	V	54.00	18.15

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449_ItemXX
 Model: DL-D06E
 Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Inner Panel USB-C) + Bluetooth+ NFC+ UWB+ Thread
 Test Voltage: Battery
 Test Standard: EN 301489-1
 Test By-/Review By: Dawn Shen/Murphy Chen
 Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
 Remark: 3m chamber



Critical_Freqs

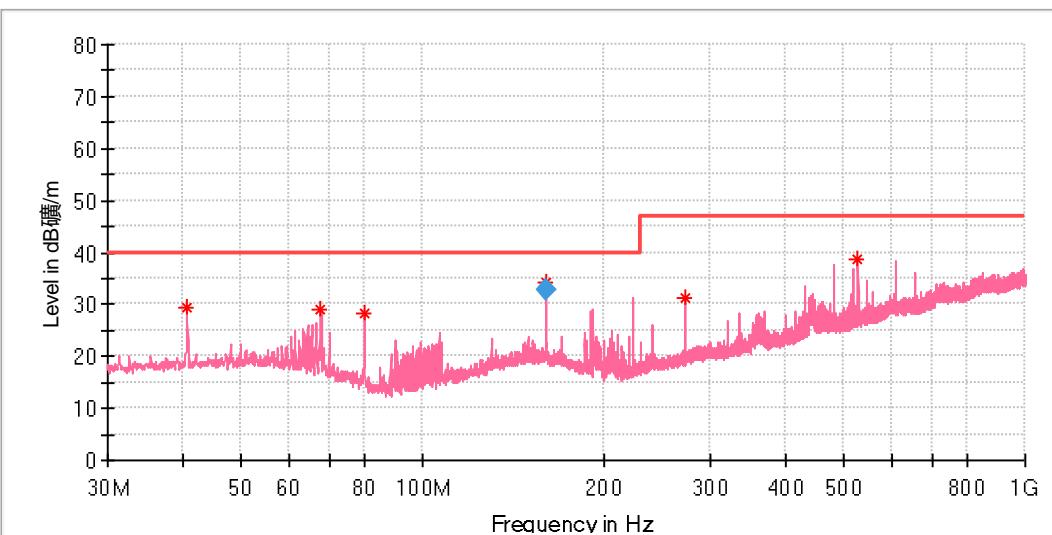
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
102.70	30.28	40.00	9.72	200.0	H	210.00	16.64
159.94	43.56	40.00	-3.56	200.0	H	7.00	21.01
165.98	39.44	40.00	0.56	200.0	H	210.00	20.85
174.71	37.92	40.00	2.08	200.0	H	210.00	20.18
190.60	38.99	40.00	1.01	200.0	H	210.00	18.29
400.00	43.27	47.00	3.73	100.0	H	182.00	24.39

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
159.94	36.63	40.00	3.37	1000.00	120.00	200.0	H	7.00	21.01
165.98	32.89	40.00	7.11	1000.00	120.00	200.0	H	210.00	20.86
174.71	32.96	40.00	7.04	1000.00	120.00	200.0	H	210.00	20.20
190.60	33.66	40.00	6.34	1000.00	120.00	200.0	H	210.00	18.24

EUT Information

EUT Name: Smart Lock U400
 Order Number: 168549449_ItemXX
 Model: DL-D06E
 Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Inner Panel USB-C) + Bluetooth+ NFC+ UWB+ Thread
 Test Voltage: Battery
 Test Standard: EN 301489-1
 Test By-/Review By: Dawn Shen/Murphy Chen
 Tem./Hum./Pressure: 23.5°C/52.3%/101kPa
 Remark: 3m chamber



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.67	29.35	40.00	10.65	100.0	V	61.00	20.32
67.78	28.91	40.00	11.09	100.0	V	45.00	18.96
80.01	28.13	40.00	11.87	100.0	V	117.00	16.27
160.10	34.17	40.00	5.83	100.0	V	67.00	21.01
271.96	31.29	47.00	15.71	100.0	V	213.00	20.87
527.99	38.63	47.00	8.37	100.0	V	213.00	27.66

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
160.10	32.82	40.00	7.18	1000.00	120.00	100.0	V	67.00	21.01

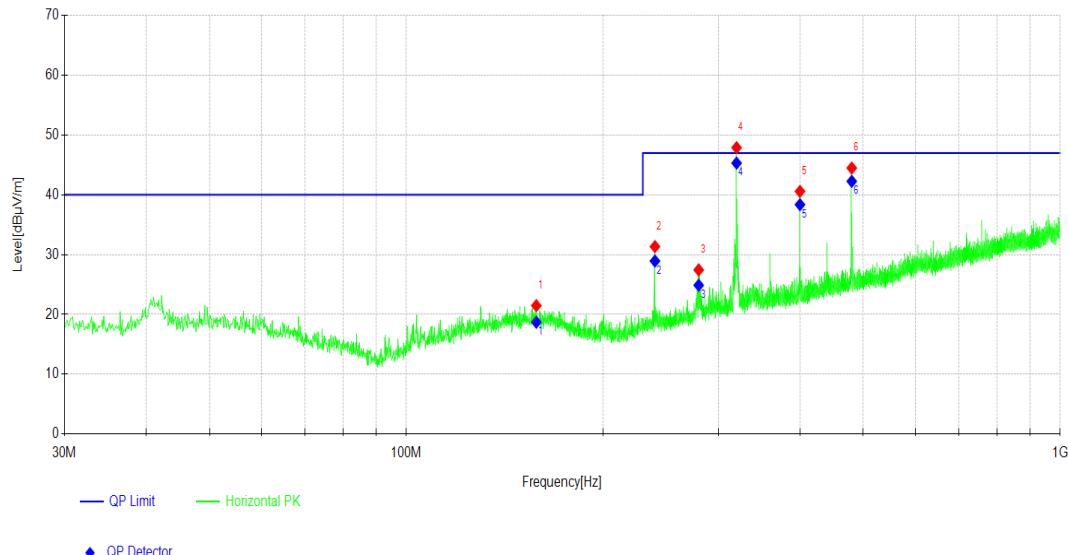
Test Report

Project Information

Customer:	GJWSZ2025-0230	EUT:	
Model:	DL-DO6E	SN:	
Mode:	Normal working (UWB)	Voltage:	230V 50Hz
Environment:	Temp: 24 °C; Humi:45%	Engineer:	LiYutong
Remark:			
Test Standard:			

Start of Test:2025-05-12 19:29:45

Test Graph



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	158.053	1.34	20.14	21.48	40.00	18.52	100	198	PK	Horizontal
2	240.026	12.71	18.64	31.35	47.00	15.65	100	106	PK	Horizontal
3	279.994	7.10	20.36	27.46	47.00	19.54	100	85	PK	Horizontal
4	319.962	26.72	21.17	47.89	47.00	-0.89	100	298	PK	Horizontal
5	399.995	17.39	23.19	40.58	47.00	6.42	100	124	PK	Horizontal
6	480.028	19.51	24.97	44.48	47.00	2.52	100	120	PK	Horizontal

Final Data List

Frequency[MHz]	QP Reading [dBμV/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
158.053	-1.43	18.71	40.00	21.29	100	198	Horizontal
240.026	10.3	28.94	47.00	18.06	100	106	Horizontal
279.994	4.52	24.88	47.00	22.12	100	85	Horizontal
319.962	24.14	45.31	47.00	1.69	100	298	Horizontal
399.995	15.17	38.36	47.00	8.64	100	124	Horizontal
480.028	17.29	42.26	47.00	4.74	100	120	Horizontal

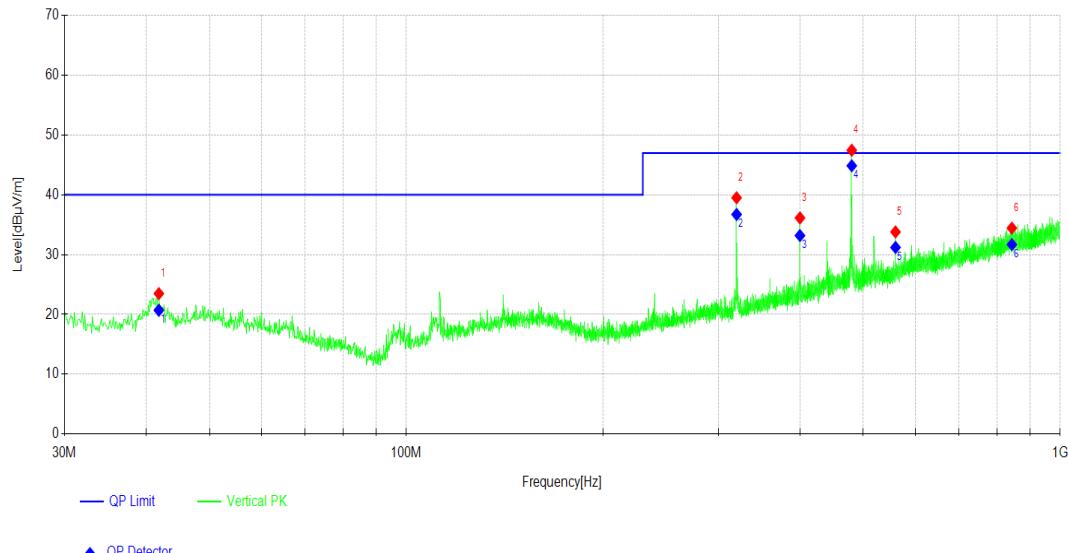
Test Report

Project Information

Customer:	GJWSZ2025-0230	EUT:	
Model:	DL-D06E	SN:	
Mode:	Normal working (UWB)	Voltage:	230V 50Hz
Environment:	Temp: 24 °C; Humi:45%	Engineer:	LiYutong
Remark:			
Test Standard:			

Start of Test:2025-05-12 19:28:46

Test Graph



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	41.835	3.78	19.71	23.49	40.00	16.51	100	290	PK	Vertical
2	319.962	18.34	21.17	39.51	47.00	7.49	100	88	PK	Vertical
3	399.995	12.95	23.19	36.14	47.00	10.86	100	38	PK	Vertical
4	480.028	22.48	24.97	47.45	47.00	-0.45	100	215	PK	Vertical
5	559.964	7.35	26.45	33.80	47.00	13.20	100	187	PK	Vertical
6	843.620	3.55	30.89	34.44	47.00	12.56	100	141	PK	Vertical

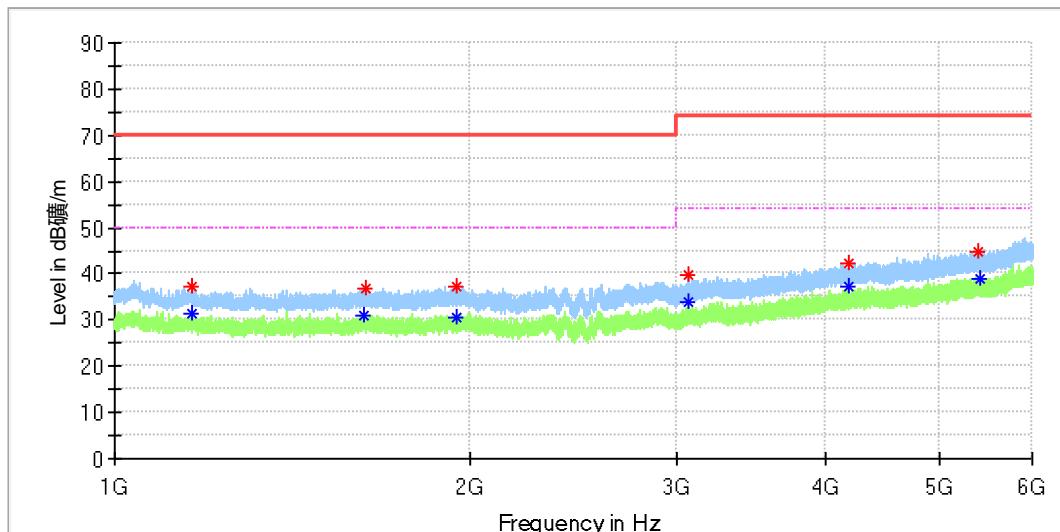
Final Data List

Frequency[MHz]	QP Reading [dBμV/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
41.835	0.99	20.70	40.00	19.30	100	290	Vertical
319.962	15.55	36.72	47.00	10.28	100	88	Vertical
399.995	10	33.19	47.00	13.81	100	38	Vertical
480.028	19.89	44.86	47.00	2.14	100	215	Vertical
559.964	4.76	31.21	47.00	15.79	100	187	Vertical
843.620	0.79	31.68	47.00	15.32	100	141	Vertical

Appendix A.4: Test Results of Radiated Emission, Above 1GHz

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Rechargeable battery charging
Test Voltage: AC 230V, 50Hz
Test Standard: EN 301489-1/-17
Test By/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

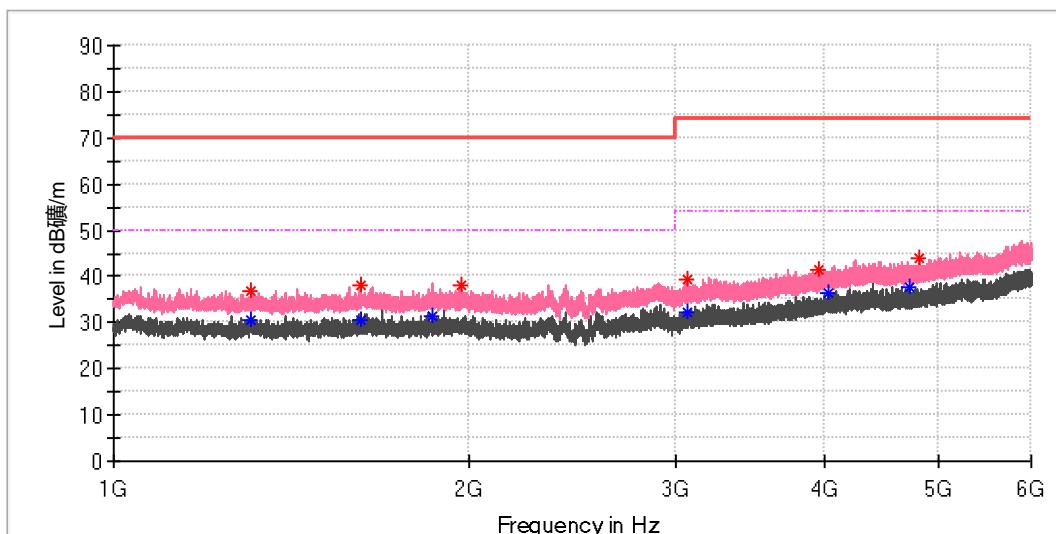


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1162.083333	---	31.54	50.00	18.46	100.0	H	326.0	-2.9
1163.125000	37.25	---	70.00	32.75	100.0	H	144.0	-2.9
1628.541667	---	30.91	50.00	19.09	100.0	H	357.0	-2.5
1630.833333	36.97	---	70.00	33.03	100.0	H	0.0	-2.5
1948.958333	---	30.49	50.00	19.51	100.0	H	66.0	-2.2
1952.291667	37.24	---	70.00	32.76	100.0	H	66.0	-2.2
3065.416667	39.56	---	74.00	34.44	100.0	H	144.0	0.2
3069.791667	---	33.83	54.00	20.17	100.0	H	259.0	0.2
4191.458333	42.15	---	74.00	31.85	100.0	H	15.0	4.4
4199.791667	---	37.10	54.00	16.90	100.0	H	182.0	4.4
5402.916667	44.74	---	74.00	29.26	100.0	H	232.0	7.8
5415.208333	---	39.04	54.00	14.96	100.0	H	30.0	7.8

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Rechargeable battery charging
Test Voltage: AC 230V, 50Hz
Test Standard: EN 301489-1/-17
Test By/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

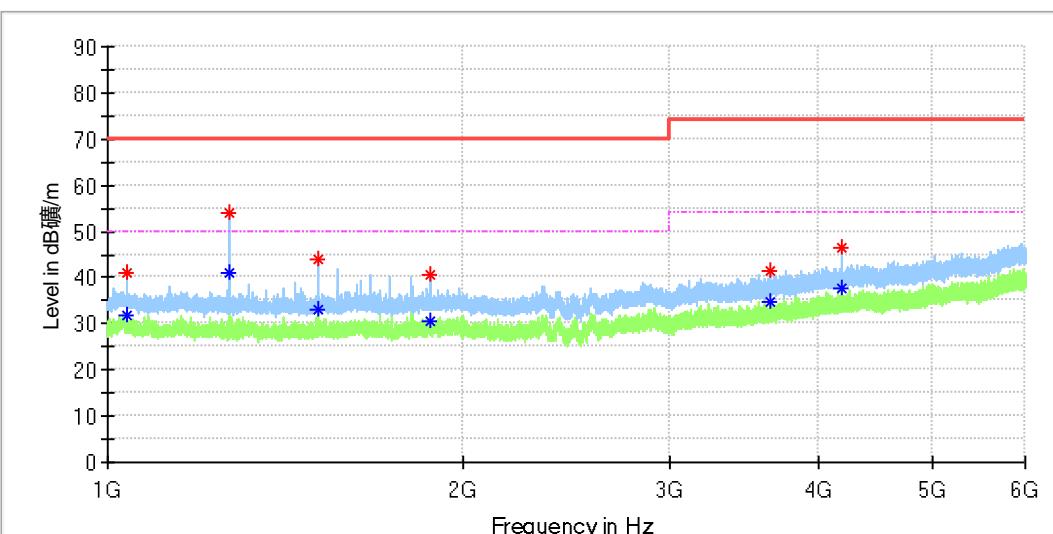


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1305.208333	---	30.72	50.00	19.28	100.0	V	20.0	-2.6
1307.708333	36.80	---	70.00	33.20	100.0	V	248.0	-2.6
1622.291667	38.16	---	70.00	31.84	100.0	V	0.0	-2.6
1622.916667	---	30.55	50.00	19.45	100.0	V	118.0	-2.6
1863.958333	---	31.32	50.00	18.68	100.0	V	274.0	-2.6
1968.541667	38.06	---	70.00	31.94	100.0	V	118.0	-2.2
3060.625000	39.19	---	74.00	34.81	100.0	V	90.0	0.1
3063.541667	---	32.06	54.00	21.94	100.0	V	103.0	0.2
3967.708333	41.58	---	74.00	32.42	100.0	V	0.0	3.6
4040.208333	---	36.32	54.00	17.68	100.0	V	311.0	4.0
4731.875000	---	37.77	54.00	16.23	100.0	V	274.0	5.9
4826.250000	43.88	---	74.00	30.12	100.0	V	241.0	6.0

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Internal rechargeable battery) + Bluetooth +NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By-/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

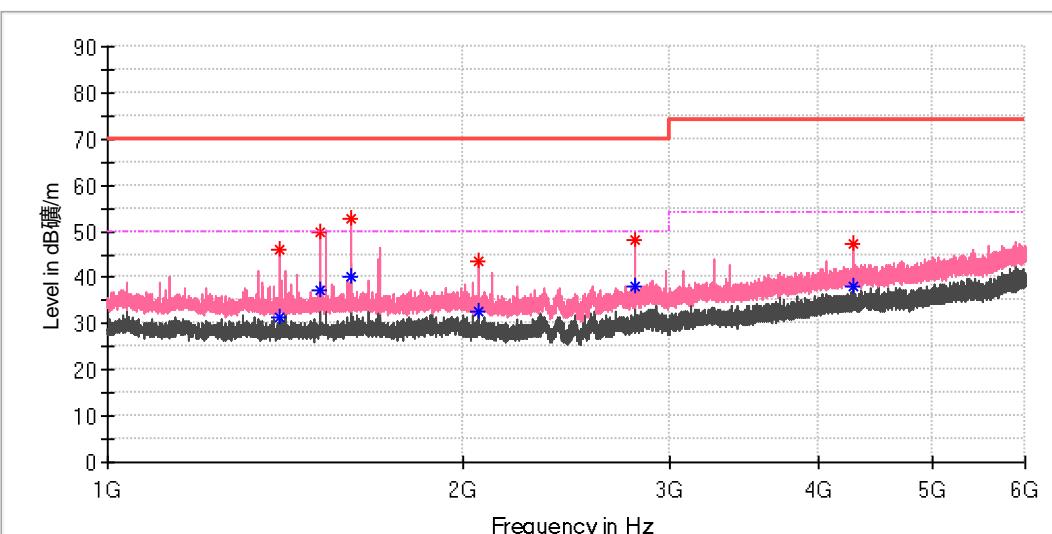


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1039.166667	40.87	---	70.00	29.13	100.0	H	63.0	-2.6
1039.791667	---	31.85	50.00	18.15	100.0	H	220.0	-2.6
1266.875000	53.92	---	70.00	16.08	100.0	H	33.0	-3.3
1266.875000	---	41.12	50.00	8.88	100.0	H	33.0	-3.3
1508.541667	---	33.14	50.00	16.86	100.0	H	33.0	-2.8
1508.541667	44.13	---	70.00	25.87	100.0	H	33.0	-2.8
1876.666667	---	30.69	50.00	19.31	100.0	H	292.0	-2.5
1878.125000	40.64	---	70.00	29.36	100.0	H	356.0	-2.5
3641.041667	---	34.88	54.00	19.12	100.0	H	274.0	2.2
3641.041667	41.24	---	74.00	32.76	100.0	H	274.0	2.2
4189.583333	---	37.56	54.00	16.44	100.0	H	33.0	4.4
4189.583333	46.43	---	74.00	27.57	100.0	H	33.0	4.4

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Internal rechargeable battery) + Bluetooth +NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By-/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

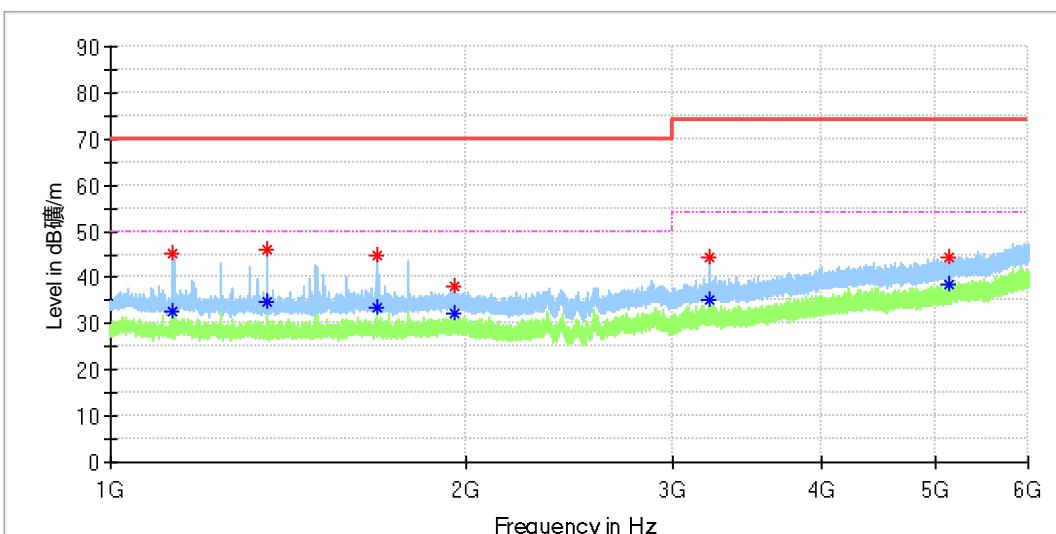


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1400.208333	45.99	---	70.00	24.01	100.0	V	265.0	-3.1
1400.416667	---	31.37	50.00	18.63	100.0	V	265.0	-3.1
1515.416667	---	37.11	50.00	12.89	100.0	V	265.0	-2.8
1515.416667	49.87	---	70.00	20.13	100.0	V	265.0	-2.8
1610.416667	---	40.31	50.00	9.69	100.0	V	246.0	-2.6
1610.416667	52.69	---	70.00	17.31	100.0	V	246.0	-2.6
2066.666667	---	32.72	50.00	17.28	100.0	V	78.0	-2.8
2066.666667	43.38	---	70.00	26.62	100.0	V	78.0	-2.8
2802.291667	---	37.89	50.00	12.11	100.0	V	169.0	-0.5
2802.291667	48.13	---	70.00	21.87	100.0	V	169.0	-0.5
4286.875000	---	38.11	54.00	15.89	100.0	V	169.0	4.7
4286.875000	47.10	---	74.00	26.90	100.0	V	169.0	4.7

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Outer Panel USB-C) + Bluetooth +NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By:/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

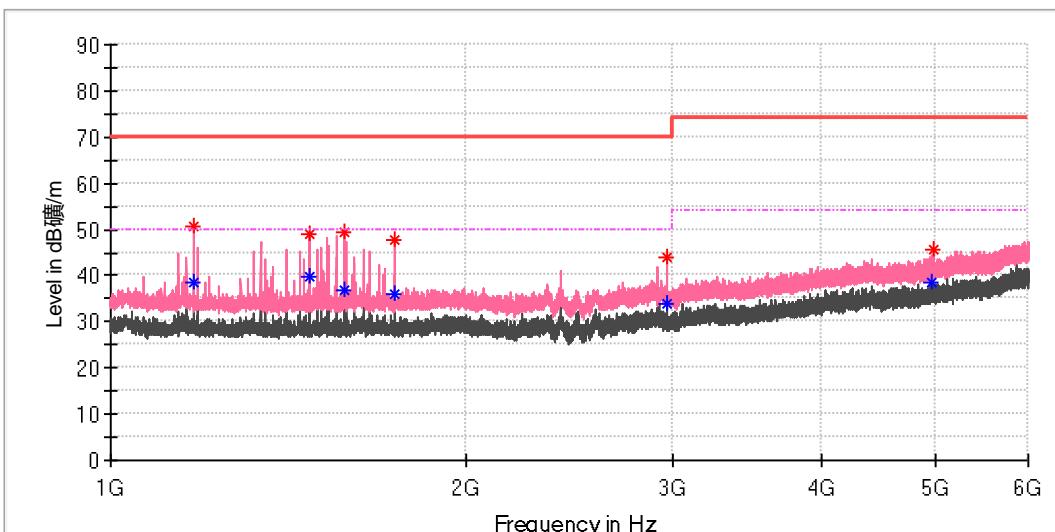


Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1129.375000	45.11	---	70.00	24.89	100.0	H	145.0	-3.5
1129.375000	---	32.67	50.00	17.33	100.0	H	145.0	-3.5
1358.958333	46.25	---	70.00	23.75	100.0	H	252.0	-3.1
1358.958333	---	34.72	50.00	15.28	100.0	H	252.0	-3.1
1679.791667	---	33.65	50.00	16.35	100.0	H	49.0	-2.8
1679.791667	44.77	---	70.00	25.23	100.0	H	49.0	-2.8
1956.666667	---	32.22	50.00	17.78	100.0	H	0.0	-2.2
1956.666667	38.16	---	70.00	31.84	100.0	H	0.0	-2.2
3223.541667	---	35.20	54.00	18.80	100.0	H	182.0	1.2
3223.541667	44.46	---	74.00	29.54	100.0	H	182.0	1.2
5138.750000	---	38.50	54.00	15.50	100.0	H	259.0	7.0
5139.166667	44.37	---	74.00	29.63	100.0	H	225.0	7.0

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Outer Panel USB-C) + Bluetooth +NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By-/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

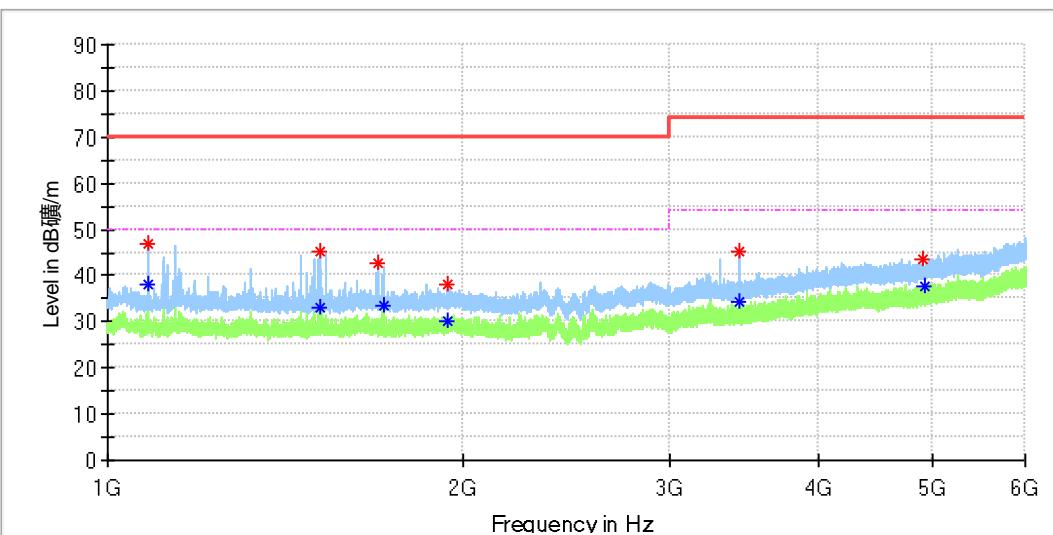


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1174.166667	50.65	---	70.00	19.35	100.0	V	55.0	-3.0
1174.166667	---	38.30	50.00	11.70	100.0	V	55.0	-3.0
1473.541667	---	39.65	50.00	10.35	100.0	V	95.0	-3.1
1473.541667	49.09	---	70.00	20.91	100.0	V	95.0	-3.1
1581.041667	---	36.92	50.00	13.08	100.0	V	101.0	-2.9
1581.041667	49.29	---	70.00	20.71	100.0	V	101.0	-2.9
1740.208333	---	35.94	50.00	14.06	100.0	V	95.0	-3.0
1740.208333	47.84	---	70.00	22.16	100.0	V	95.0	-3.0
2960.208333	---	33.80	50.00	16.20	100.0	V	11.0	-0.3
2960.208333	44.05	---	70.00	25.95	100.0	V	11.0	-0.3
4973.541667	---	38.41	54.00	15.59	100.0	V	0.0	6.6
4978.958333	45.51	---	74.00	28.49	100.0	V	55.0	6.6

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Inner Panel USB-C) + Bluetooth+ NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By-/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC

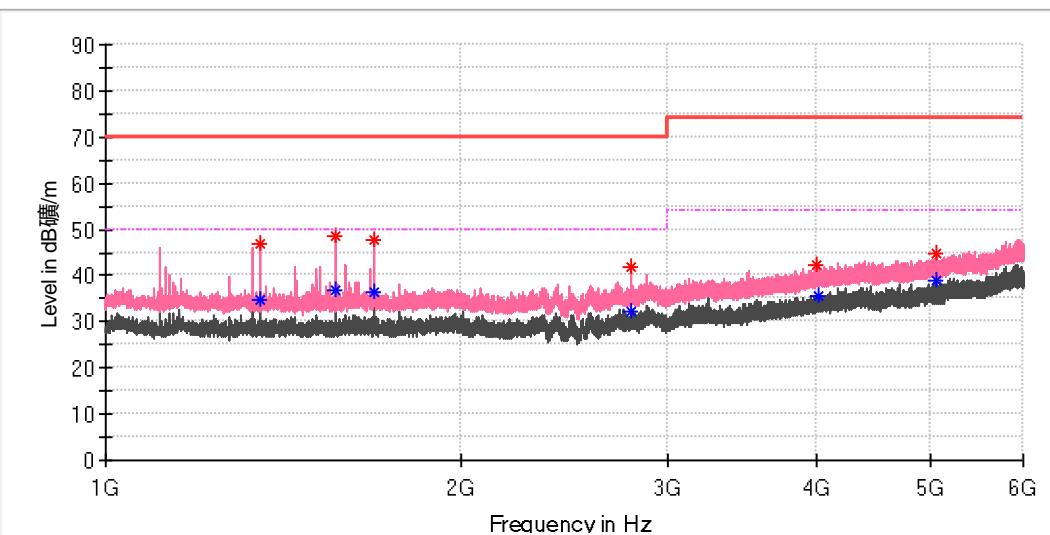


Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1082.500000	---	37.92	50.00	12.08	100.0	H	41.0	-3.4
1082.500000	46.79	---	70.00	23.21	100.0	H	41.0	-3.4
1514.375000	---	33.11	50.00	16.89	100.0	H	178.0	-2.8
1514.375000	45.39	---	70.00	24.61	100.0	H	178.0	-2.8
1695.416667	42.74	---	70.00	27.26	100.0	H	140.0	-3.1
1715.833333	---	33.68	50.00	16.32	100.0	H	145.0	-3.1
1941.458333	---	30.01	50.00	19.99	100.0	H	145.0	-2.2
1943.541667	37.97	---	70.00	32.03	100.0	H	154.0	-2.2
3431.041667	---	34.53	54.00	19.47	100.0	H	166.0	1.3
3431.041667	45.02	---	74.00	28.98	100.0	H	166.0	1.3
4912.708333	43.47	---	74.00	30.53	100.0	H	246.0	6.4
4922.083333	---	37.61	54.00	16.39	100.0	H	88.0	6.4

EUT Information

EUT Name: Smart Lock U400
Order Number: 168549449_ItemXX
Model: DL-D06E
Test Mode: Normal operation (Inner Panel+ Outer Panel+ Powered by Inner Panel USB-C) + Bluetooth+ NFC+ UWB+ Thread
Test Voltage: Battery
Test Standard: EN 301489-1-17
Test By-/Review By: Dawn Shen/Shower Dai
Tem./Hum./Pressure: 24.2°C/51.5%/101kPa
Remark: 10m SAC



Critical_Freqs

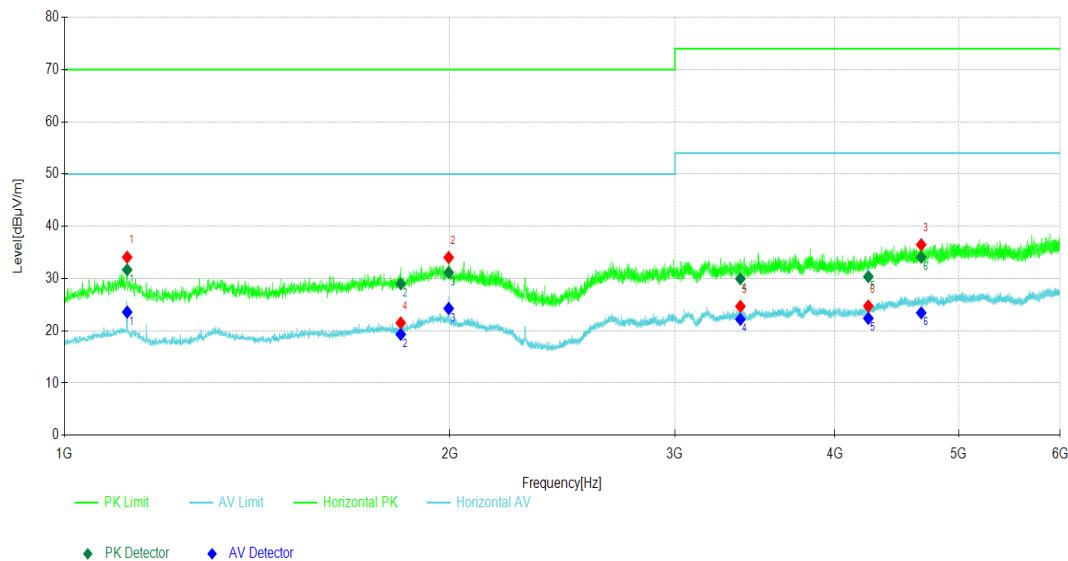
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1351.250000	---	34.80	50.00	15.20	100.0	V	29.0	-3.1
1351.250000	46.98	---	70.00	23.02	100.0	V	29.0	-3.1
1566.041667	---	36.96	50.00	13.04	100.0	V	120.0	-3.0
1566.041667	48.41	---	70.00	21.59	100.0	V	120.0	-3.0
1690.833333	---	36.39	50.00	13.61	100.0	V	59.0	-3.0
1690.833333	47.84	---	70.00	22.16	100.0	V	59.0	-3.0
2791.041667	---	32.33	50.00	17.67	100.0	V	194.0	-0.5
2791.041667	41.81	---	70.00	28.19	100.0	V	194.0	-0.5
4014.375000	42.13	---	74.00	31.87	100.0	V	83.0	3.9
4023.333333	---	35.45	54.00	18.55	100.0	V	131.0	3.9
5054.583333	---	38.74	54.00	15.26	100.0	V	176.0	6.7
5066.875000	44.59	---	74.00	29.41	100.0	V	219.0	6.7

RE Test Report

Project Information

Project No:	GJWSZ2025-0230	EUT:	
Model:	DL-D06E,DL-D06D	Sample No:	3-1
Environment:	Temp: 24°C; Humi:45%	Engineer:	LiYutong
Mode:	Normal working (UWB)	Voltage:	230V 50Hz
Remark:			

Test Graph



Suspected Data List

Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg
1119.512	Horizontal	-23.54	57.64	34.10	70.00	35.90	PK	100	210
1996.600	Horizontal	-19.89	53.93	34.04	70.00	35.96	PK	100	240
4672.867	Horizontal	-13.21	49.70	36.49	74.00	37.51	PK	100	110
1831.583	Horizontal	-21.29	42.82	21.53	50.00	28.47	AV	100	60
3374.737	Horizontal	-17.20	41.87	24.67	54.00	29.33	AV	100	10
4248.325	Horizontal	-15.05	39.80	24.75	54.00	29.25	AV	100	170

Final Data List

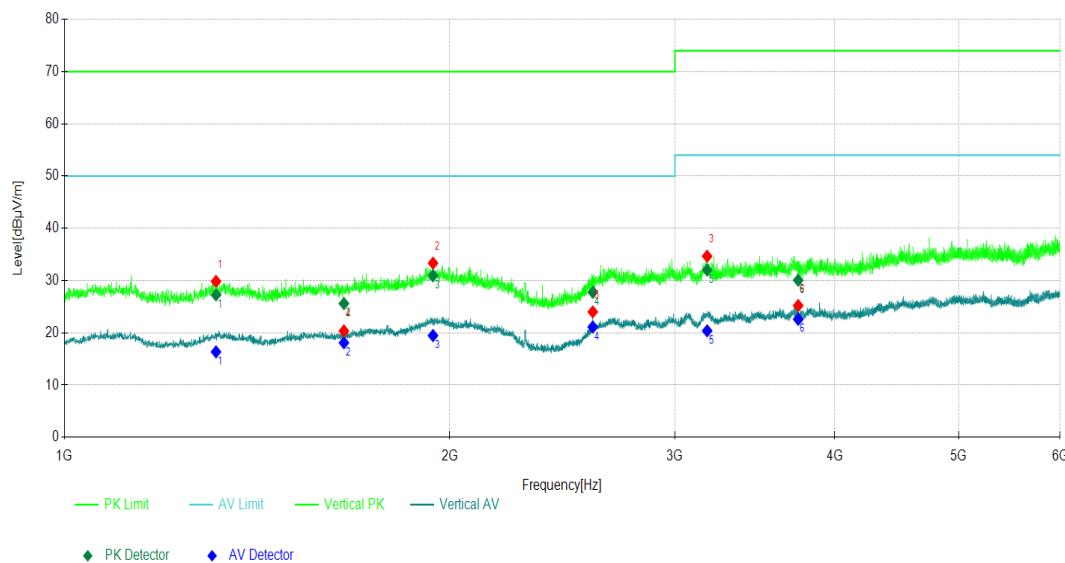
Frequency [MHz]	Factor [dB]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1119.512	-23.54	31.67	70.00	38.33	23.58	50.00	26.42	100	100	Horizontal
1831.583	-21.29	28.99	70.00	41.01	19.32	50.00	30.68	100	60	Horizontal
1996.600	-19.89	31.16	70.00	38.84	24.27	50.00	25.73	100	240	Horizontal
3374.737	-17.20	29.97	74.00	44.03	22.20	54.00	31.80	100	10	Horizontal
4248.325	-15.05	30.37	74.00	43.63	22.39	54.00	31.61	100	170	Horizontal
4672.867	-13.21	34.08	74.00	39.92	23.44	54.00	30.56	100	50	Horizontal

RE Test Report

Project Information

Project No:	GJWSZ2025-0230	EUT:	
Model:	DL-D06E,DL-D06D	Sample No:	3-1
Environment:	Temp: 24°C; Humi:45%	Engineer:	LiYutong
Mode:	Normal working (UWB)	Voltage:	230V 50Hz
Remark:			

Test Graph



Suspected Data List

Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg
1313.531	Vertical	-23.41	53.27	29.86	70.00	40.14	PK	100	270
1941.094	Vertical	-19.86	53.20	33.34	70.00	36.66	PK	100	250
3178.718	Vertical	-17.24	51.90	34.66	74.00	39.34	PK	100	30
1653.565	Vertical	-22.86	43.23	20.37	50.00	29.63	AV	100	190
2587.659	Vertical	-19.63	43.64	24.01	50.00	25.99	AV	100	310
3744.774	Vertical	-16.17	41.38	25.21	54.00	28.79	AV	100	40

Final Data List

Frequency [MHz]	Factor [dB]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1313.531	-23.41	27.27	70.00	42.73	16.36	50.00	33.64	100	270	Vertical
1653.565	-22.86	25.61	70.00	44.39	18.09	50.00	31.91	100	190	Vertical
1941.094	-19.86	30.95	70.00	39.05	19.48	50.00	30.52	100	250	Vertical
2587.659	-19.63	27.77	70.00	42.23	21.12	50.00	28.88	100	310	Vertical
3178.718	-17.24	32.02	74.00	41.98	20.39	54.00	33.61	100	290	Vertical
3744.774	-16.17	30.07	74.00	43.93	22.59	54.00	31.41	100	40	Vertical